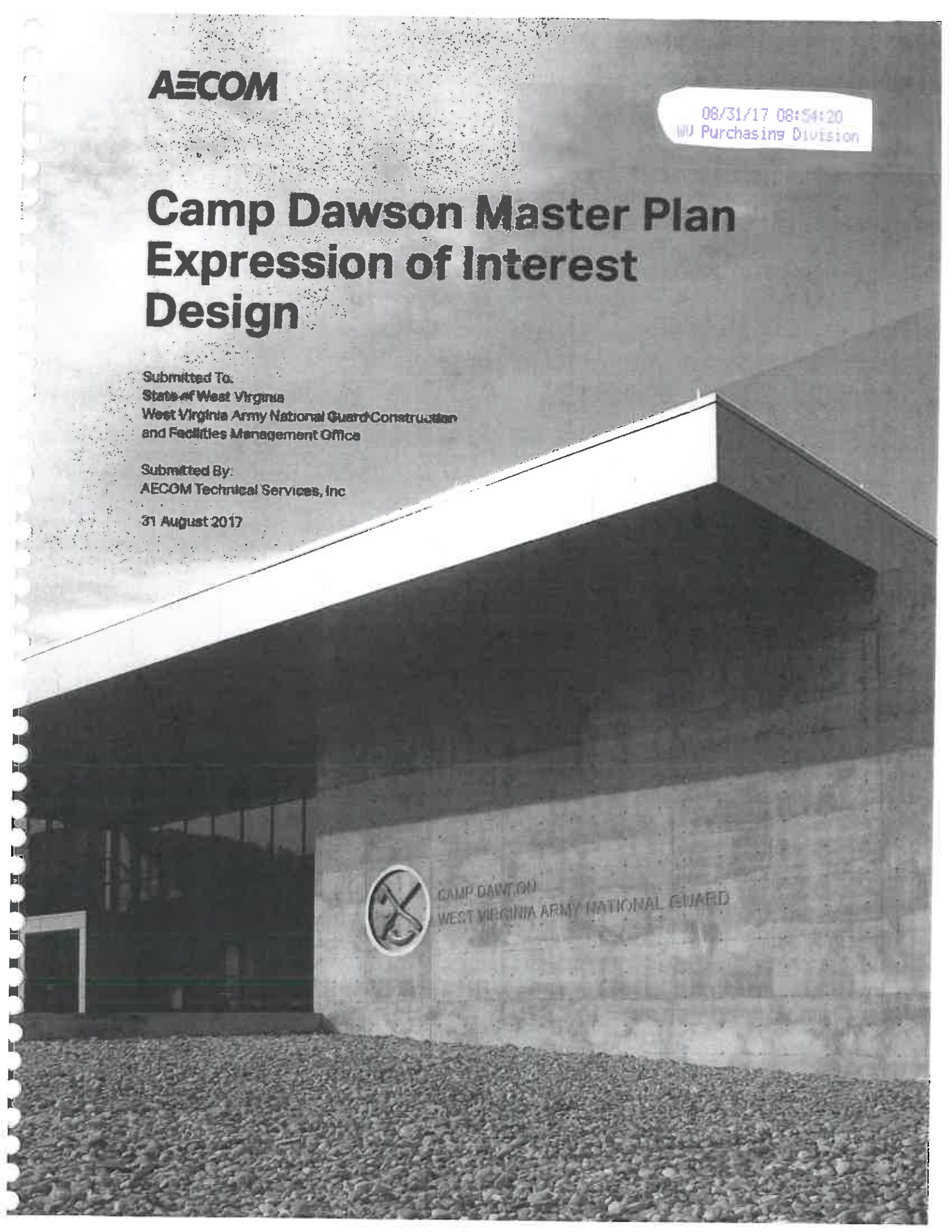
AECOM

Camp Dawson Master Plan Expression of Interest Design

Submitted To:
State of West Virginia
West Virginia Army National Guard/Construction and Facilities Management Office

Submitted By:
AECOM Technical Services, Inc

31 August 2017



AECOM

Transmittal

RFP No. CEOI 0603 ADJ1800000002
State of West Virginia, West Virginia Army National Guard Construction and Facilities Management Office

To:
Bid Clerk
Department of Administration
Purchasing Division
2019 Washington Street, East
Charleston, WV 25305

From:
AECOM Technical Services, Inc.
3101 Wilson Boulevard
Suite 900
Arlington, VA, 22201
703.682.4900

Enclosed is the following per your solicitation requirements:

- One copy of AECOM's response to the Camp Dawson Master Plan EOI Design.

RFP Cover Sheet

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

State of West Virginia
Centralized Expression of Interest
02 — Architect/Engr

Proc Folder: 364242
Doc Description: CAMP DAWSON MASTER PLAN EOI DESIGN
Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2017-08-10	2017-08-31 13:30:00	CEOI 0603 ADJ1800000002	1

BID RECEIVING LOCATION

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

VENDOR

Vendor Name, Address and Telephone Number:

AECOM Technical Services, Inc.
3101 Wilson Boulevard
Suite 900
Arlington, VA, 22201
703.682.4900

FOR INFORMATION CONTACT THE BUYER

Crystal Rink
(304) 558-2402
crystal.g.rink@wv.gov

Signature X [signature] **FEIN #** 95-2661922 **DATE** 31 August 2017

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

Page : 1 **FORM ID : WV-PRC-CEOI-001**

West Virginia Army National Guard Joint Interagency Training and Education Center (JITEC)

AECOM Imagine it. Delivered.

AECOM
3101 Wilson Boulevard
Suite 900
Arlington, VA 22201, USA
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+1 (703) 682 4900 fax

31 August 2017

Bid Clerk
Department of Administration
Purchasing Division
2019 Washington St. E
Charleston, WV 25305

RE: CEOI 0603 ADJ1800000002, State of West Virginia, West Virginia Army National Guard, Construction and Facilities Management Office - Camp Dawson Master Plan Expression of Interest Design

Dear Ms. Rink:

AECOM is pleased to submit our qualifications to the State of West Virginia Purchasing Division for consideration to develop your Real Property Master Plan for the Camp Dawson Training Center.

Over the past 30+ years, we have consistently served all branches of the Department of Defense (DoD), including the Army National Guard (ARNG). We understand the mandates and demands placed on the ARNG, and the importance of supporting the Soldier, sustaining military testing and training lands, achieving resource stewardship, and complying with existing and emerging requirements and regulations.

Our talented employees — including architects, engineers, designers, planners, scientists and management professionals — serve clients in more than 150 countries around the world. Leveraging a unique pool of resources and talent, we deliver fully integrated services collaborating across disciplines and geographies to shape innovative solutions for our clients.

Within the State of West Virginia, AECOM maintains four offices in Bridgeport, Harpers Ferry, Kenova, and Morgantown providing local engineering, planning, and environmental analytical services. We have extensive knowledge of the environmental resources, regulatory agencies, and issues of concern that will affect this project.

Our experts bring a depth of experience specifically suited to provide master planning for the Camp Dawson Training Center. We bring the necessary knowledge of applicable regulations, requirements, criteria, standards, and project types enabling rapid alignment of the exact expertise to deliver a cost-effective solution in the form of a high-quality master plan. Local knowledge, combined with our extensive familiarity of ARNG missions and requirements, allows our team to hit the ground running, provide proactive solutions, and benefit from years of lessons learned. In addition to our full in-house capabilities to support West Virginia Army National Guard (WVARNG), we offer:

- Our work with ARNGs in all 50 states demonstrates the quality and exceptional level of service we provide.
- Substantial and relevant deliverables for other DoD and civilian agencies offer the latest advancements in the industry featuring state-of-the-art, flexible, and cost-effective planning solutions.
- We have completed more than 250 Master Plans for DoD installations in the last five (5) years implementing the principles of UFC 2-100-01, including for both active and reserve component installations.

Enclosed is one copy of our response to your RFP No. CEOI 0603 ADJ1800000002 for Master Plan Design. We are available to answer any questions and look forward to continuing our support of your mission.

Sincerely,

John Bachmann
Director
john.bachmann@aecom.com
+1 (703) 682 4970

Greg Ault
Principal
greg.ault@aecom.com
+1 (305) 447 3532

West Virginia Army National Guard Joint Interagency Training and Education Center (JITEC)

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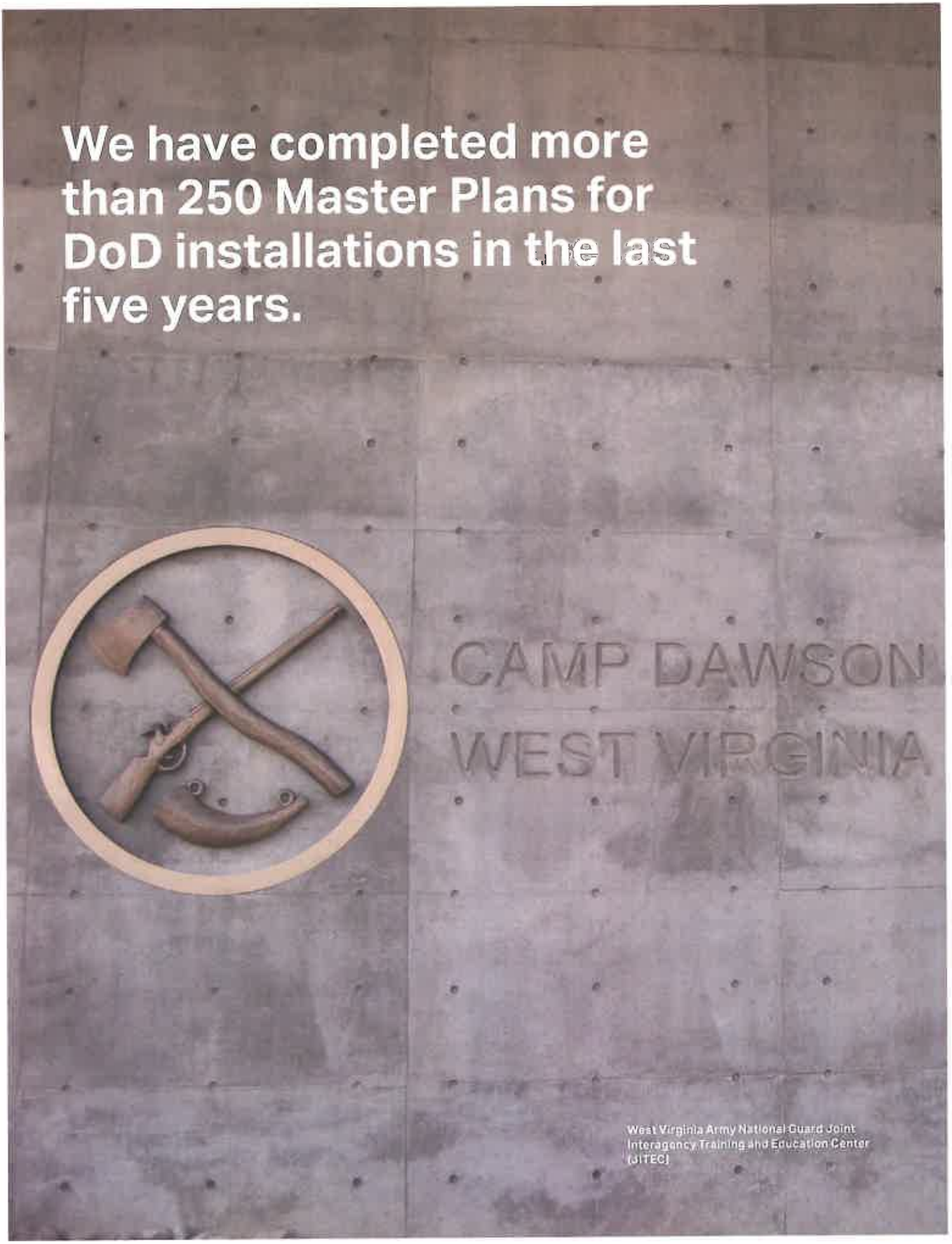

We have completed more than 250 Master Plans for DoD installations in the last five years.
CAMP DAWSON
WEST VIRGINIA
West Virginia Army National Guard Joint Interagency Training and Education Center (JITEC)

Executive Summary

AECOM is one of the largest and most respected providers of professional, technical, and management support services in the world, notably including Master Planning services for the Department of Defense (DoD).

Our talented employees — including architects, engineers, designers, planners, scientists and management professionals — serve clients in more than 150 countries around the world. Leveraging a unique pool of resources and talent, we deliver fully integrated services collaborating across disciplines and geographies to shape innovative solutions for our clients.

Within the State of West Virginia, AECOM employs more than 32 staff providing engineering, planning, and environmental analytical services in our offices in Bridgeport, Harpers Ferry, Kenova, and Morgantown. Our staff provides extensive knowledge of local environmental resources, regulatory agencies, and issues of concern, which will be utilized for this project.

Over the past 30+ years, we have consistently served all branches of the DoD, including the Army National Guard (ARNG). We understand the mandates and demands placed on the ARNG, and the importance of supporting the Soldier, sustaining military testing and training lands, achieving resource stewardship, and complying with existing and emerging requirements and regulations.

AECOM's team is comprised of professionals with a depth of experience specifically suited to provide master planning for the Camp Dawson Training Center near Kingwood, WV. We bring the necessary knowledge of applicable regulations, requirements, criteria, standards, and project types enabling rapid alignment of the exact expertise to deliver a cost-effective solution in the form of a high-quality master plan. Local knowledge, combined with our extensive familiarity of ARNG missions and requirements, allows our team to hit the ground running, provide proactive solutions, and benefit from years of lessons learned. In addition to our full in-house capabilities to support West Virginia Army National Guard (WVARNG), we offer:

- **Experience with WVARNG.** Provided architectural and engineering design services in association with other local firms for the Joint Interagency Training and Education Center (JITEC). AECOM staff have specific master planning and environmental planning experience at Camp Dawson and have intimate knowledge of the operational missions and existing conditions.
- **Repeat ARNG customers.** As evidenced by the project examples provided within, we have enjoyed long-term relationships and repeat projects with multiple ARNG States, highlighting the quality an exceptional level of service.
- **A cost-effective team.** Currently working on similar ARNG and other DoD planning projects.
- **Extensive Master Planning experience.** AECOM has completed more than 250 Master Plans for DoD installations in the last five (5) years implementing the principles of UFC 2-100-01, for both active and reserve component installations.
- **Value add Solution.** Due to our extensive knowledge of the environmental conditions at Camp Dawson, we are able to integrate and provide key environmental considerations into the master plan development concepts.

Staffing Plan and Personnel Qualifications

01

Staffing Plan

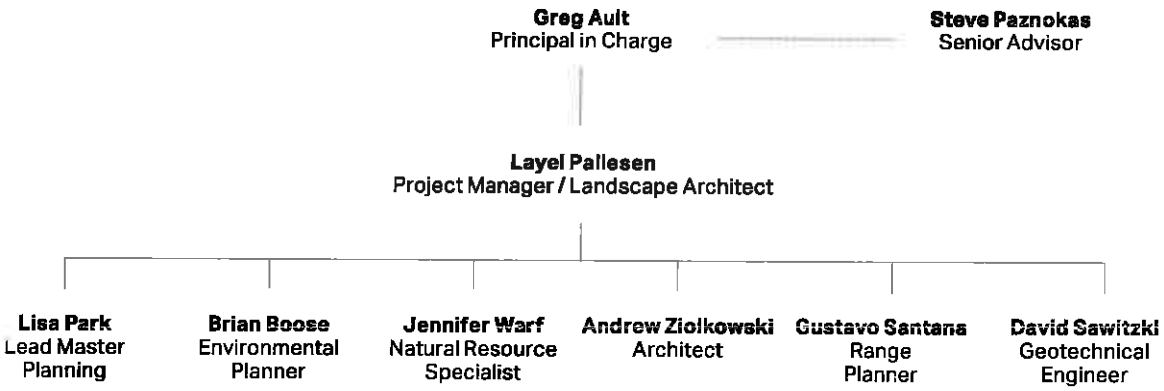
Our team brings an in-house team of experienced military planners, architects, engineers, and key support staff to deliver a cost-effective and comprehensive master plan for Camp Dawson. Each team member identified has extensive relevant experience with the ARNG and other military agencies relevant to the delivery of your project.

The organizational chart below illustrates our delivery team led by our ***Principal in Charge, Greg Ault,*** who has significant DOD master planning experience. Mr. Ault specializes in facilitating vision workshops and leverages the process to develop concepts that fully support mission requirements. We have included ***Steve Paznokas as a Senior Advisor*** to our team because of his knowledge of WVARNG and the Camp Dawson site. ***Project Manager, Layel Pallesen,*** will be your day-to-day contact during the overall project. Ms. Pallesen was a master planner for the Office of the Chief Army Reserves and developed over 25 plans for reserves sites across the United States. Through this experience, Ms. Pallesen is very familiar with reserve operations and requirements.

We also have included key specialists to address the comprehensive services required to deliver a mission compliant and environmentally sensitive master plan:

- ***Lisa Park, Lead Master Planner,*** has extensive DOD planning experience. Ms. Park leads the Federal Planning studio has lead over 25 master plans following the Installation Master Planning UFC 2-100-01.
- ***Brian Boose, Environmental Planner,*** has intimate knowledge of Camp Dawson through his environmental planning experience at the site. Mr. Boose has worked with the ARNG since 1993 and has worked in all 54 ARNG States and Territories.
- ***Andrew Ziolkowski, Architect,*** brings knowledge of the site from his work as a member of the design team for the Joint Interagency Training and Education Center.
- ***Gustavo Santana, Range Planner,*** brings extensive experience providing master planning services for installations with large range operations.

Organizational Chart



Greg Ault
Principal in Charge

Education
Bachelor of Science in Landscape Architecture, Purdue University, 1978

Years of Experience
With AECOM: 24
With Other Firms: 11

Select Awards and Honors
American Planning Association Honor Award, NAS Patauxent River Vision Plan, 2011

Smart Growth Award, ULI & The Smart Growth Alliance, Washington DC, for Metro West Urban Design Plan, 2006

Awards Program Outstanding Federal Planning Project, Naval Station Rota Overview Regional Shore Infrastructure Plan, Rota, Spain, American Planning Association, Federal Planning Division, 2005

Select Presentations
Speaker, "Sustainable Military Planning, Historic Precedents", APA National Conference, 2011

Moderator, "Sustainability Systems Integration Model (SSIM), AIA National Convention, Air Force Center of Engineering and Environmental Excellence, 2010

"Sustainability Modeling for DoD Facilities" Air Force Center for Environmental Excellence, 2009

Mr. Ault currently serves as the Design and Planning Principal of the Coral Gables/Miami office of AECOM. His career encompasses over 34 years of international experience as a senior planner, landscape architect, and project manager. His work with large-scale, complex mixed-use urban projects has focused on the conceptual stages of retail, office and residential planning. He is currently heavily involved in large scale strategic master planning and Future's Visioning for a variety of public and private sector clients focusing on a whole systems approach to sustainable planning, design and implementation for these clients.

Similar Project Experience

Combined Arms and Amphibious Assault Course (CAAAC) and G-10 Vegetation Clearing Pre-NEPA Planning Study, MCB Camp Lejeune, NC: Principal in Charge. A comprehensive analysis for training beyond current platoon level mechanized training and movement for Marine Corps Base (MCB) Camp Lejeune. This project provided extensive combined arms training alternatives for small arms, machine guns, mortars, wheeled and tracked vehicles, MOUT facilities, live fire shoot houses, and air to ground live fire range training for Company to Battalion level Combined Arms mechanized maneuvers that would support individual and unit level training and at least two MEU work-ups a year, Joint Task Force Exercises (JTFEX), and MEU Certification Exercises (CERTEX). Additionally, the performed comprehensive analysis and opportunities were completed in a manner such that they are easily transferable to any future NEPA documentation requirements.

Naval Air Station Patuxent River Vision Plan: This project won a 2011 American Planning Association National Honor Award and established a framework for a 2035 Vision for the Base for Public/Private Ventures, Enhanced Use Leasing and leveraging federal funding and private sector investment for the next generation of US Airpower Research and Development.

United States Marine Corps Air Station Cherry Point Visioning Workshops, Havelock, NC: Mr. Ault led a series of workshops for the US Marine Corps, to establish the initial framework for a 2050 Vision for the recapitalization of the flightline, hangars and backshops, administrative and housing facilities and FRC industrial complex to facilitate the future homebasing of the F-35 B & C variants at the all-weather Base. This $2B recapitalization project focused on the incremental bed-down of each squadron as the legacy airframes are sundowned. Specific studies included the siting of a New ATCT facility, APOE facility, hangars and support systems and security improvements aligned with the F-35 security needs.

Marine Corps Air Station New River, NC: Principal in Charge. Master planning and long-range development plan for the redevelopment of the Base for a 2030 horizon vision plan. The project included a flight line recapitalization program for the V-22 and supporting projects.

India Navy Master Plans, Karwar, India: Principal in Charge of Master Planning. The project included a 2050 Vision Plan for a new tactical jet fighter base and helo squadrons including airfield, ATCT siting, hangars and support facilities, administrative, warehousing and housing for enlisted and senior grade officers. The project also included a strategic vision for the overall Navy Base Master Plan to accommodate new mission requirements and recapitalization at an existing Navy Base in the Karwar region.

Royal Saudi Air Force, KSA: Principal in Charge of master planning. Working jointly with the RSAF and USAF, the project includes the physical master planning and visioning for five bases and over $400M (US) of construction projects within the Kingdom. The sale of F-15 tactical fighter jets to the RSAF demands that all aspects of the Bases, including airfield operations, supporting industrial uses, town centers, residential components, training, administrative facilities, R&D and quality of life programs are seamlessly integrated into the existing built environments of these strategic Bases.

United States Marine Corps, MCB Camp Lejeune Facilities Planning, Naval Station Norfolk, VA. Principal in charge to assist the USMC in the comprehensive master planning effort that includes five distinct base areas of Camp Lejeune, which are: French Creek, Courthouse Bay, Camp Johnson, Camp Geiger and the MCAS New River base. Camp Lejeune occupies 153,000 acres, with 14 miles of beach on the Atlantic Ocean, more than 450 miles of road, 50 miles or railroads, and 6,800 buildings and facilities supporting 144,000 Marines, sailors, and their families.

Colombian Navy Base Recapitalization: Principal Planner. Conceptual Master Planning and project visioning for the development of a new primary Navy Base in Cartagena and recapitalization of the existing Base in the historic Old City.

United States Marine Corps Camp Pendleton, CA: Principal Facilitator. The project established a long-term Vision Plan for the Base in an intensive three-day workshop with senior leadership for this 120,000 acre Base, which is the primary USMC resource on the West Coast of the US. The team worked with Marine Corps leadership to establish the way ahead to maximize land resources and facilities for the 100,000 employees, military personnel and residents for land-sea and air training operations.

Naval Station Norfolk, VA: Principal Co-Facilitator. The project included 'Course of Action' (COA) workshops for the Waterfront, Naval Air Station and Base Core Area for a 30 year visions and capital improvement plans for near, mid and long term development.

Naval Submarine Base (NAVSUBASE), Kings Bay Master Plan, Kings Bay, GA: Principal in charge. Planning services for the development of a master plan that integrates additional studies including basic facility requirements (BFR), parking and traffic study, and installation appearance plan for the 14,000-acre installation.

Kuwait City, Kuwait: Principal Co-Planner. The project included alternative development plans for multiple sites to design and construct a new Department of Defense Headquarters facility for all Kuwaiti military branches.

US Navy, APMM Integrated Decision Support System, Naval Security Group Activity, Northwest Chesapeake, VA: Project manager/planner for the master plan update, one of a new activity planning and management model (APMM) projects for the Navy that incorporates traditional planning methods with interactive computer database and Intergraph CADD applications.

US Navy, Northeast/Southeast Regional Waterfront Infrastructure Plans, Various Locations: Project manager for the 20-year plans for the Navy's waterfront assets along the East Coast, from Maine to Puerto Rico.

United States Army, Fort Stewart RCI, Fort Stewart, GA: Planner for revitalization and construction of 1,115 residential units as part of the Assistant Secretary of the Army (installations and environment) residential communities initiative.

United States Army, Fort Polk, Fort Polk, LA: Planner for revitalization and construction of 3,650 residential units as part of the Assistant Secretary of the Army (installations and environment) residential communities initiative.

United States Army, Fort Eustis/Story/Monroe RCI, Forts Eustis, Story, and Monroe, VA: Planner for revitalization and construction of 2,927 residential units as part of the Assistant Secretary of the Army (installations and environment) residential communities initiative.

United States Army, Fort Bragg RCI, Fort Bragg, NC. Planner for revitalization and construction of 4,750 residential units as part of the Assistant Secretary of the Army (installations and environment) residential communities initiative.

United States Army, Fort Belvoir RCI, Fort Belvoir, VA: Planner for revitalization and construction of 2,070 residential units as part of the Assistant Secretary of the Army (installations and environment) residential communities initiative

Layel Pallesen RLA, PMP
Project Manager / Landscape Architect

Education
Associate of Arts and Sciences, Biology, Brigham Young University, 2000

Bachelor of Landscape Architecture, University of Florida, 2006

Years of Experience
With AECOM: 2
With Other Firms: 10

Professional Registrations
Virginia Registered Landscape Architect (RLA)

American Institute of Certified Planners (AICP)

LEED Green Associate

Affiliations
American Planning Association (APA) Federal Planning Division (FPD) & Virginia Chapter

American Society of Landscape Architects, Potomac Chapter

Ms. Pallesen is a Senior Associate with AECOM, registered landscape architect, certified planner, and LEED Green Associate with over 12 years of experience in military master planning, including serving as a master planner for the Office of the Chief Army Reserves. Her planning expertise focuses on asset management, requirements analysis, strategic planning and analysis, site development, land use planning, project development and programming, and sustainability. At the Office of the Chief Army Reserve, she managed the development of 25 different master plans for Reserve installations and sites across the United States as well as Puerto Rico, and was influential in developing the Reserve's Facility Investment Strategy, Capital Investment Strategy, and Vision Plans for 1,600 facilities in the inventory.

Similar Project Experience

National Guard Bureau, Organizational Readiness Training Center Area Development Plan (ADP), Camp Atterbury, IN: Planner in project team tasked with developing an Area Development Plan to address both active duty and regional National Guard and U.S. Army Reserve unit training requirements and capabilities. The ADP summarizes an analysis of existing physical conditions and data, provides recommendations for future development projects, and prioritizes key investment areas over the next 30 years. Proposed projects include reclaiming land for construction of Indiana National Guard offices, barracks, and other facilities.

U.S. Army Reserve Installation Management Directorate (ARIMD) Vision Plan and Capital Investment Strategy: Project Manager for ARIMD that provided project oversight, planning development and programming, and regulatory review of master plans for Regional Support Commands: 63rd, 81st, 88th, and 99th. Facilitated in- and out-briefs for Commanders of each RSC and utilized ASIP, GFEBS, HQIIS, ISR, and RPLANS to review over 1,600 facilities and established investment strategies. 2014

Installation Development Plan for Commander, Naval District Washington Naval Air Station (NAS) Patuxent River, MD: Project Manager responsible for producing a master plan including short-, mid-, and long-range development at NAS Patuxent River, MD. This project includes an evaluation of existing conditions, visioning and concept workshops, and recommendations for future development in a comprehensive plan that prioritizes capital improvements projects and investments.

Installation Development Plan for Commander, Navy Region Southeast (CNRSE) Naval Air Station Key West, FL: Project Manager of planning team tasked with developing a comprehensive analysis of physical planning and infrastructure issues at NAS Key West documented in an Installation Development Plan. The collaborative planning process collects and analyzes pertinent data, engages stakeholders in decision making methods, and develops the report reflective of mission needs at NAS Key West, and incompliance with Federal and Department of the Navy regulations and policies.

U.S. Army John F. Kennedy Special Warfare Center and School (USAJFKSWCS), Area Development Plan (ADP) for the Special Forces Underwater Operations (SFUWO) School, NAS Key West, FL: Project Manager of planning team tasked with identifying, analyzing, and master planning for facilities, infrastructure, and site improvements to provide the conceptual study and cost estimates necessary to support existing and proposed mission essential facilities for the SFUWO School at NAS Key West, FL. Planning analysis and proposed actions to meet both the USAJFKSWCS and SFUWO School's requirements are documented in an ADP and ten DD Form 1391s.

Master Planning Training Manual, Naval Facilities Engineering Command (NAVFAC) Headquarters, Washington, DC: Project Manager of planning team tasked with developing a 32 hour course of master planning training for installation master planners and a 4 hour course for Installation Commanders. Training is required to educate NAVFAC planners on UFC 2-100-01 Installation Master Planning, to introduce them to how it is applied within CNIC and NAVFAC, and how governance, data, planning tools and strategic laydown will aid in developing master plans. Developed the materials and modules to train the NAVFAC planners including instructor's guide and student manual to be used across the Navy.

Steve Paznokas
Senior Advisor

Education
MBA, University of Louisville

BS, Environmental Science, Indiana University

Years of Experience
With AECOM: 5
With Other Firms: 20

Mr. Paznokas is AECOM's Army Account Manager which covers the USACE, Army, ARNG, and USAR. He is responsible for strategic direction and overall account management. Steve has 25 years of continuous, progressive experience overseeing engineering, planning, and environmental service contracts. He provides corporate oversight and commitment of resources for successful completion of Army projects throughout CONUS and OCONUS. On this contract, Steve will function in the role of Principal-In-Charge and will work closely with the Project Manager and the team to ensure they have the resources and capabilities to successfully execute this Master Planning.

Similar Project Experience

AECOM Army Account Manager 2012 – Present: Oversees and directs a large, diverse, technical group of professionals across AECOM's global footprint. AECOM has over 150 Army contracts several of which are focused on the ARNG as well as Master Planning services. In Steve's account management role, he routinely works with AECOM's Nationwide NGB ARNG team and the Master Planning practice in the execution of Master Plans. AECOM's Master Planning resources and experience is broad and extensive.

AECOM Master Planning Resources:
- 462 Master Planners
- 344 AICP Planners nationwide
- 250+ Successfully executed Planning Projects

AECOM Relevant Master Planning Experience:
- ARNG Readiness Center Transformation Master Plans (RCTMP), for the ILARNG, SCARNG, and PAARNG [Contract No. W90FYQ-10-D-0010 0008]
- USACE Huntsville Engineering Center, US Army Reserve Installation Management Directorate National Visioning and Capital Investment Strategy [Contract No. W90FYQ10D0010,TO#ZW01]
- USACE Sacramento District, Training and Implementation for UFC 2-100-01 for Installation Master Planning,Various Locations [Contract No. W91238-11-D-0016, TO#12]

AMEC Army Account Manager 2000 - 2012: Specific to the WVARNG, Steve has served as PIC for a broad array of planning and engineering projects at Camp Dawson Collective Training Center (CDCTC). He is familiar with all 8000 acres of the CDCTC having worked at Camp Dawson's 410 acre cantonment area as well as each of the distinctive training areas: Volkstone, Briery Mountain, Goldmine, Whitehair, and Pringle. In addition, Steve has worked closely with proposed team members: Brian Boose, Jennifer Warf, and David Sawitzki who technically led and managed each of the following WVARNG projects. Steve's and the teams in depth background of the WVARNG CDCTC will prove beneficial to this Master Planning project.

Master Planning
- Conceptual Master Plan of CDCTC, Camp Dawson, WV
- Real Property Assessments and PRIDE database Updates at CDCTC and WV Statewide.

NEPA Planning
- EA for Construction and Operation of Training Facilities at CDCTC Pringle Tract Training Area, Camp Dawson, WV
- EA for Range Development at CDCTC Briery Mountain Training Area, Camp Dawson, WV

Natural Resource Planning
- Endangered Species Management Plan (ESMP) for Running Buffalo Clover at CDCTC, Camp Dawson, WV
- INRMP, EA, and IWFMP for the CDCTC, Camp Dawson, WV

Engineering Designs & Studies
- AE Design for the Modified Record Fire Range (MRFR) at Camp Dawson Collective Training Center (CDCTC) Briery Mountain Training Area, Camp Dawson, WV
- Geotechnical Study at CDCTC MRFR in support of range development, Camp Dawson, WV
- South Gate Road Geotechnical Slope Repair at CDCTC, Camp Dawson, WV
- Hydrogeologic Groundwater Assessment at CDCTC, Camp Dawson, WV
- JITEC Geotechnical Study at CDCTC, Camp Dawson, WV
- Visiting Officers Quarters Geotechnical Study at CDCTC, Camp Dawson, WV
- Multi-Purpose Building Geotechnical Study at CDCTC, Camp Dawson, WV

Lisa Park PE
Lead Master Planner

Education
Bachelor of Science, Industrial Engineering, Virginia Polytechnic Institute and State University, 1990

Years of Experience
With AECOM: 16
With Other Firms: 10

Professional Registrations
Professional Engineer, VA, 1996

Affiliations
American Planning Association (APA)

Society of American Military Engineers (SAME)

Select Awards and Honors
Outstanding Federal Planning Program, Naval History and Heritage Command, Museum Functional Plan, American Planning Association, Federal Planning Division, 2013

Honor Award, Regionally Integrated Master Program (RIMP) for the Commander, Navy Region Washington, NAVFAC Design Awards, 2009

Awards Program Outstanding Federal Planning Project, Naval Station ROTA Overview Regional Shore Infrastructure Plan, Naval Station Rota, Spain, American Planning Association, Federal Planning Division, 2005

Ms. Park has 26 years of real property master planning experience focusing on supporting all branches of the DoD. Ms. Park has directed and managed a wide range of projects from regional planning projects encompassing multiple bases to comprehensive installation plans to detailed-oriented space management studies. Ms. Park has a thorough understanding of the May 2013 memorandum from the Undersecretary of Defense that states all bases must develop installation master plans by October 2018 and the UFC 2-100-01, Installation Master Planning. She has directed or managed numerous master planning projects for the Navy and Army following the new UFC.

Similar Project Experience

Area Development Plan for Fort Belvoir Davison Army Airfield: As Project Director, leading team of planners to conduct a comprehensive analysis of physical planning and infrastructure issues at Davison Army Airfield to develop an Area Development Plan. The collaborative planning process collects and analyzes existing conditions data, engages stakeholders in decision making, and develops the report reflective of mission needs. The plan also includes updating the requirements analysis that will be uploaded into RPLANS by base planners. The plan is compliant with Federal and Department of the Army regulations and policies to include Installation Master Planning UFC 2-100-01.

Installation Development Plan for Commander, Navy Region Europe, Africa, and Southwest Asia (CNREURAFSWA) Naval Station Rota, Spain; Naval Air Station Sigonella, Italy; Naval Support Activity Souda Bay, Greece: As Project Director, led planning team tasked with developing a comprehensive analysis of physical planning and infrastructure issues at three installations to develop an Installation Development Plan. The collaborative planning process collects and analyzes pertinent data, engages stakeholders in decision making, and develops the report reflective of mission needs at the installations. The plans are compliant with Federal and Department of the Navy regulations and policies to include the Installation Master Planning UFC 2-100-01.

Installation Development Plan for Commander, Navy Region Southeast (CNRSE) Naval Air Station Key West, FL: As Project Director, led planning team tasked with developing a comprehensive analysis of physical planning and infrastructure issues at Naval Air Station Key West to develop an Installation Development Plan. The collaborative planning process collects and analyzes pertinent data, engages stakeholders in decision making, and develops the report reflective of mission needs at Key West. The plan is compliant with Federal and Department of the Navy regulations and policies to include the Installation Master Planning UFC 2-100-01.

Installation Development Plan (IDP) for Commander, Navy Region Southeast (CNRSE), Naval Air Station (NAS) Meridian, MS: As Project Director, led planning team tasked with generating an Installation Development Plan for NAS Meridian. A comprehensive analysis of physical planning and infrastructure issues is necessary at NAS Meridian as changes in personnel and aircraft loading have generated new requirements affecting the Navy's physical presence. The IDP summarizes an analysis of existing plans and data, provides recommendations for future development, policies, and projects, and prioritizes key investment areas over the next 25 years. The IDP is compliant with Federal and Department of the Navy regulations and policies to include the Installation Master Planning UFC 2-100-01.

Installation Development Plan for Commander, Navy Region Mid-Atlantic (CNRMA) Naval Station Great Lakes, IL: As Project Director, led planning team tasked with developing a comprehensive analysis of physical planning and infrastructure issues at Naval Station Great Lakes to develop an Installation Development Plan. The collaborative planning process collects and analyzes pertinent data, engages stakeholders in decision making, and develops the report reflective of mission needs at Great Lakes. The plan is compliant with Federal and Department of the Navy regulations and policies to include the Installation Master Planning UFC 2-100-01.

Brian Boose
Environmental Planner

Education
BS, Biological Sciences/ Ecology, University of California: Davis,1990, Summa Cum Laude

Years of Experience
With AECOM: 2
With Other Firms: 28

Professional Registrations
Certified Environmental Professional (CEP)

Affiliations
National Association of Environmental Professionals

Society of Wetland Scientists

Select Awards and Honors
Outstanding Federal Planning

Mr. Boose has over 30 years of continuous, progressive experience in the engineering, planning, and environmental services industry, both nationally and globally. He is technically proficient in National Environmental Policy Act (NEPA) compliance, natural and cultural resources management, environmental management and compliance, meeting facilitation and coordination, master planning, and public outreach and involvement.

Specific to the ARNG, Mr. Boose has been actively and consistently working with the ARNG since 1993. He has provided services to all 54 ARNG States and Territories, including the WVARNG, and has experience with most ARNG installations, including Camp Dawson. Through his work in the environmental and master planning arenas for the ARNG, Mr. Boose has developed a comprehensive understanding of ARNG mission requirements, facilities, assets, and installations.

Similar Project Experience

ARNG, Duke University, Duke Environmental Leadership (DEL) Program: Preparing and Documenting Environmental Impact (NEPA) Analyses for the ARNG, Senior Course Trainer, 2008-2011. Nicholas School of the Environment and Earth Sciences, Durham, North Carolina.

ARNG NEPA and ECOP Handbooks, ARNG-ILE, Arlington, VA, Project Manager, 2011: Project Manager who prepared the ARNG's 4-volume, 2011 NEPA Handbook and the 2011 ARNG ECOP Handbook. Worked closely with all levels of ARNG HQ staff over two years during preparation. Handbooks received significant positive client feedback and widespread acceptance in all 54 states/territories.

West Virginia ARNG, Modified Record Fire Range (MRFR) at Briery Mountain, Camp Dawson, WV: Program Manager, 2009. Responsible for planning and document development for proposed training range.

ARNG, Multiple NGB Environmental and Planning Documents: Senior Program Manager, 2000-current. Responsible for the preparation of numerous plans and studies for the ARNG concerning military training and cantonment area development. Work has included RDP, TSMP, RPDP, and RPMP planning documents and evaluations, as well as associated environmental studies and NEPA documentation. States/territories in which work has been completed include: WV, OH, PA, NJ, MT, VT, NC, AL, FL, CA, MO, IN, IL, NV, UT, MA, ND, SD, AZ, HI, GA, SC, VA, WY, KY, USVI, PR, DC, and several others. Responsible for all public outreach and involvement components associated with relevant documentation.

Pennsylvania ARNG, Transformation of the 56th Brigade into a Stryker Brigade Combat Team (SBCT) EIS, Multiple Installations, Eastern United States: Senior Program Manager, 2002-2006. Responsible for all aspects of EIS preparation addressing proposed actions of the PAARNG in transforming the 56th Brigade into an SBCT. Involved installations include Ft. Indiantown Gap, Ft. Pickett, Ft. Drum, Ft. AP Hill, Ft. Dix, and Ravenna Training and Logistics Site, as well as facilities across the Commonwealth of Pennsylvania. Proposed facilities include new major training and support facilities primarily at FTIG and Ft. Pickett to support the transformed brigade.

ARNG Nationwide Fielding for the MCV, MV-4, and VMMD PEA/FNSI. 2015-2016: Coordinated with ARNG Headquarters and 26 state ARNGs to assist in the planning and fielding of 4 pieces of equipment across 48 installations.

Florida ARNG Camp Blanding Artillery Training Expansion EA/FNSI. 2017: Assisting FLARNG to expand artillery training at Camp Blanding.

Jennifer Warf
Natural Resources Specialist

Education
MS, Environmental Studies, The University of Charleston, SC, 2003

BA, Zoology, Miami University, OH, 1999

Years of Experience
With AECOM: 1
With Other Firms: 15

Ms. Warf is a Natural Resources Specialist with over 16 years of experience in preparing large-scale natural resources management plans and National Environmental Policy Act (NEPA) documents, obtaining waterways permits (e.g., Clean Water Act [CWA] Section 404 and 401 permits), conducting ecological surveys and wetland delineations. She has been responsible for a variety of project tasks ranging from project management, ecological field assessments, coordination and consultation with regulatory representatives and clients, analysis and document preparation, Quality assurance / quality control, and geographic information systems (GIS) support. Ms. Warf is notably experienced with natural resources surveys, management, regulations, and issues specifically on military installations.

She has served as a project manager, author, field team leader, or technical reviewer on two EISs and more than 35 EAs for the US Army pertaining to military training, installation real property plans, master plans, range development, construction of new facilities, flood damage reduction, and natural resources management. She has also served in a similar capacity on more than 75 ARNG documents/studies focusing on installation-level planning and natural resources management: Integrated Natural Resources Management Plans (INRMPs); endangered species management plans (ESMPs); biological assessments (BAs); Integrated Wildland Fire Management Plans (IWFMPs); Forest Management Plans (FMPs); and planning level surveys including topography, soils, surface waters, wetlands, flora, fauna, and protected species. Her high level of dedication and service to the ARNG is shown by the large number of ARNG States for which Ms. Warf has provided repeat services.

Similar Project Experience

ARNG Nationwide Environmental Assessment for Fielding of the Mine Clearance (MC-V), Unmanned mine Vehicle (MV-4), and Vehicle Mounted Mine Detection (VMMD) System at Multiple Locations: Deputy Project Manager, 2015-2016, $145.5K. Deputy Project Manager for the EA responsible for project oversight, client interface, and QA/QC reviews. The Proposed Action included the proposed fielding of, and training with, the MC-V or "Flail", MV-4, and VMMD or "Husky" by the ARNG at a national level. Under the Proposed Action, the ARNG proposes fielding six MC-Vs to three State ARNGs, 18 MV-4s to 13 State ARNGs, and 152 VMMDs to 26 State ARNGs; three State ARNGs (Texas, Missouri, and South Carolina) would receive all three types of equipment. Overall, 26 State ARNGs, including 48 ARNG units, are involved in the Proposed Action. The project allowed the ARNG to accomplish the requisite mine detection and clearance training necessary to maintain parallel capabilities with US Army Soldiers.

West Virginia ARNG, EA for Construction and Operation of Training Facilities on the Pringle Tract Training Area, CDCTC, Preston County, WV: QA/QC Reviewer, 2011. Responsible for reviewing the EA. The Proposed Action involved development of improved training facilities for the WVARNG to facilitate training tasks necessary to operate within a built-up/urban area (e.g. Military Operations on Urban Terrain [MOUT]), Medium and Heavy Equipment Training, Tactical Training Base (TTB) training, and Vehicle Maneuver and Convoy training. The project allowed the client to remain in compliance with NEPA and other federal, state, and local laws and regulations.

EA for Range Development on the Briery Mountain Training Area at Camp Dawson Collective Training Area (CDCTC), West Virginia ARNG, Preston County, WV: 2011. Author. Responsible for preparing portions of the Affected Environment and Environmental Consequences sections for the EA. The Proposed Action would provide in-state facilities for required training on tasks necessary to operate within a built-up/urban area (the Urban Assault Course); breaching techniques (the Live Fire Breach Facility), and employment of live fragmentation hand grenades (the Hand Grenade Familiarization Range). The project allows the client to remain in compliance with NEPA and other federal, state, and local laws and regulations.

Florida Army National Guard (ARNG), Environmental Assessment for Proposed Use of North Post Artillery Firing Points and Associated Training at Camp Blanding Joint Maneuver Training Center (CBJTC), Clay County, FL: Deputy Project Manager, 2016-Present, $30K. Deputy Project Manager for the EA responsible for project oversight, client interface, and QA/QC reviews. The Proposed Action includes the establishment of five artillery firing points in the North Post of CBJTC.

Andrew Ziolkowski RA
Architect

Education
Master of Architecture, 1977
Westminster University
(formerly Polytechnic of Central London)

Bachelor of Architecture, 1972,
Westminster University

Exchange Program, 1973-1974, Rensselaer Polytechnic Institute, Troy, New York

Years of Experience
With AECOM: 21
With Other Firms: 19

Professional Registrations
Registered Architect: United Kingdom, 1977; Maryland, 1982
[redacted]; West Virginia, 2009

NCARB, 1983

Affiliations
National Counsel Architects Registration Board, USA 1984 - current

Member of The International Planners Association 1984 - 1996

Andrew Ziolkowski has extensive experience in the design and management of construction documentation packages and integrating multiple engineering groups for secure facilities, especially radio-frequency shielded buildings. He is also experienced in the construction administration for such buildings.

Similar Project Experience

West Virginia Army National Guard, Joint Interagency Education and Training Center, Camp Dawson, Kingwood, WV: Project architect for the 283,000-square foot, $110 million Army National Guard campus-style facility for training and operational mission support slated for LEED-NC Silver certification. The project consists of three buildings: a new 82,000-square foot operations building; an 180,000-square foot billeting (hotel) expansion; and a 21,000-square foot expansion of existing Regional Training Institute. The operations building consists of four distinct areas: the Joint Operations Center (JOC); a suite of secure training rooms; base headquarters and JITEC administrative offices; and a 6,000-square foot server and telecommunications room.

National Guard Bureau, Army National Guard Readiness Center, Arlington, VA: Provided technical assistance for the new 250,000-SF headquarters building for the National Guard. The $128 million project (three phases and over $24 million of FF&E and specialty audiovisual facilities) is being designed to meet LEED-NC Gold certification on a very tight site. A five-story triangular tower and three levels below grade meet the design challenges of site restrictions, including force protection and zoning height requirements on a constrained site, creating an architecturally compelling signature facility that amplifies the site's landscape. Below grade stories underneath a landscape park roof include an auditorium, conferencing center, gymnasium, office spaces and a command center. The project also includes a garage for 550 cars.

Air National Guard, Air National Guard Readiness Center Expansion, Andrews AFB, MD: Provided technical assistance for the multi-phase program management, master planning, architectural design and structural engineering for the $75 million, four-story 170,000-square foot addition to the Air National Guard (ANG) Readiness Center. The project was prepared in approximately ten design packages for implementation over three years. Originally a $22 million facility, the 2005 Base Realignment and Closure mandates increased the building population and more than doubled the scale. Designed to achieve a LEED-NC certification, it includes administrative office areas, an independent conference center and a cafeteria. Design challenges include developing an exterior aesthetic that blends with the current adjacent brick and glass curtainwall buildings, while complying with the Andrews AFB architectural and planning standards. Constrained by adjacent wetlands, the project site covers approximately 32 acres and will accommodate parking for over 1,000 cars, a memorial grove, and a plaza between the new and existing buildings. The facility will meet the force protection setbacks of and be in full compliance with UFC 4-010-01 and 4-010-02 DOD Minimum Antiterrorism Standoff Distances for Buildings.

National Guard Bureau, Building 3236 and Building 3227 Renovations, Andrews AFB, MD: Under an IDIQ contract for the National Guard Bureau, served as project architect for the $1.87 million renovation of an 11,312-square foot administration building and a 7,163-square foot pavements and grounds building at Andrews AFB. The design included comprehensive interior repairs, reconfigurations, and upgrades to modernize the facility and create adequate space; ADA compliance; integration of current technology; installation of new fire suppression system and repair of existing fire detection; and demolition. The design complies with AT/FP standards and includes energy-saving standards.

Gustavo Santana MLA
Range Planner

Education
Master of Landscape Architecture, School of Architecture, Florida International University, 2002, Cum Laude

Bachelor of Design in Plannerural Studies, School of Architecture, Florida International University, 1999, Cum Laude

Years of Experience
With AECOM: 14
With Other Firms: 2

Affiliations
American Planning Association (APA)

American Society of Landscape Planners (ASLA)

Mr. Santana is a motivated and resourceful designer/planner and project manager who has been extensively involved in strategic planning, site and detail design, construction administration on a variety of large and small scale projects including DoD, commercial, educational, and streetscapes related projects. He has worked closely in providing clients with community and campus master plans, utilizing a full range of planning and design resources to manage change and improve quality of life.

Similar Project Experience

Combined Arms and Amphibious Assault Course (CAAAC) and G-10 Vegetation Clearing Pre-NEPA Planning Study, MCB Camp Lejeune, NC: Range Planner. A comprehensive analysis for training beyond current platoon level mechanized training and movement for Marine Corps Base (MCB) Camp Lejeune. This project provided extensive combined arms training alternatives for small arms, machine guns, mortars, wheeled and tracked vehicles, MOUT facilities, live fire shoot houses, and air to ground live fire range training for Company to Battalion level Combined Arms mechanized maneuvers that would support individual and unit level training and at least two MEU work-ups a year, Joint Task Force Exercises (JTFEX), and MEU Certification Exercises (CERTEX). Additionally, the performed comprehensive analysis and opportunities were completed in a manner such that they are easily transferable to any future NEPA documentation requirements.

Marine Corps Air Station Beaufort, SC: Project Manager / Planner. Installation Master Plan and three Area Development Plans for long-range planning for the redevelopment of the Base for a 2030 horizon vision plan. The project includes flightline recapitalization program for the F-35 and supporting projects for mission essential, quality of life and administrative and support uses.

US Air Force Installation Development Plan (four), Multiple locations CONUS: Overall Project Manager. Managed the development of four Installation Development Plans based upon new UFC planning guidance. Installations include Cape Canaveral Air Force Station / Patrick AFB, Tinker AFB, Seymour Johnson AFB, and Joint Base Charleston. IDPS determine long-range requirements to recommend capitalization projects that are aligned with Air Force Strategic Goals and planning guidance

U.S. Army Installation Management Command (IMCOM) Installation Development Plan Practicums: Lead Facilitator for multiple on-site five- day Area Development Plan Charrettes and Vision Workshops at multiple CONUS and OCONUS bases that involve multiple stake holders and installation leadership. (2014 to Present)

Marine Corps Air Station New River, NC: Project Manager / Planner. Master planning and long-range development plan for the redevelopment of the Base for a 2030 horizon vision plan. The project included a flightline recapitalization program for the V-22 and supporting projects for mission essential, quality of life and administrative and support uses.

Marine Corps Air Station Cherry Point, Havelock, NC: Project Manager / Landscape Planner. The project included a 2050 Vision Plan for the Land Use and overall Base Master Plan for the recapitalization of the flightline to accommodate the F-35B Homebasing anticipated in 2019. The project also included and transportation systems plan, airfield and hangar master plan and ACTC (Air Control Tower) siting study.

United States Marine Corps Camp Lejeune, NC: Project Manager / Landscape Planner. To support the Grow the Force efforts for over 90,000 Base personnel, this 155,000 acre project provided 2030 master plans for five Camps within the Base to create a blueprint for future development of the 'living, working and training' environments.

NAVSUBASE Kings Bay Master Plan, Kings Bay, GA: Landscape Planner. Development of the NAVSUBASE Kings Bay master plan integrating additional studies including: Basic Facility Requirements (BFR), Parking and Traffic Study, and Installation Appearance Plan for the 14,000-acre installation.

David Sawitzki MASc, PE
Geotechnical Engineer

Education
B.S.E, Civil Engineering, Geological Engineering Program, Princeton University, 1988

M.A.Sc., Civil Engineering, Geotechnical Engineering Program, University of Waterloo, 1989

Years of Experience
With AECOM: 4
With Other Firms: 23

Professional Registrations
Professional Engineer, Florida 1993[redacted]

Professional Engineer, Kentucky 1999 [redacted]

Mr. Sawitzki has 27 years of experience as a Geotechnical Engineer, Project Manager and Program manager for USACE task orders, IDIQ contracts and geotechnical engineering applications. His career had focused on developing the necessary geotechnical and hydrogeologic information in support of base development, MILCON construction, dam and levee design and risk assessments. Mr. Sawitzki has served as a Geotechnical Subject Matter Expert to the USACE, FEMA, ARNG and NRCS on various geotechnical applications including supporting planning charrettes, master planning development, design parameter development and construction cost estimates, prepared renderings, drawings and graphics and facilitated internal and public meetings.

Similar Project Experience

MRF Range Geotechnical Study, WVARNG, Camp Dawson, WV: Project manager responsible for geotechnical study in support of a new Modified Record Fire (MRF) Range. Project included site assessment and providing site preparation, pavement and foundation recommendations for a 30+ acre range, supporting buildings and an approximately 1/5-mile long access road to be located on rough, hilly terrain. Provided layout support, completing geotechnical borings, laboratory testing, and geotechnical engineering recommendations for civil and structural design. Work completed to optimize rock and soil bearing foundations.

South Gate Road Geotechnical Slope Repair, WVARNG, Camp Dawson, WV: Geotechnical principal-in-charge responsible for geotechnical study in support of a slope repair to prevent South Gate Road from sliding into the Cheat River at Camp Dawson, WV. Project included advancing 10 borings to top of bedrock and into bedrock within a 300-foot failed slope area, surveying of the failed road and slope, completion of a thorough laboratory testing program and developing a typical cross section that described the failing slope conditions. Computer program SLOPE/W was used to back-calculate soil and rock properties given the surveyed slope and road geometry. Subsequently, a series of slope repair design concepts were evaluated geotechnically and structurally and presented to the Owner for selection of the repair approach. Prepared complete civil and structural plans and specifications for the selected repair option and for Contractor bidding. Finally, provided construction oversight and QA/QC inspection throughout construction to confirm structural, geotechnical and drainage elements were correctly installed.

Hydrogeologic Groundwater Assessment, WVARNG, Camp Dawson, WV: Geotechnical principal-in-charge responsible for hydrogeologic groundwater assessment of portions of Camp Dawson, WV. This study was performed to aid in understanding the surficial/groundwater interaction at Camp Dawson within the 410-acre cantonment area. Relatively high groundwater levels have caused challenges for various development projects. Six borings and six monitor wells were installed to investigate subsurface conditions and measure subsurface transmissivity of the alluvial soils as well as bedrock beneath the site. Field and laboratory data was used to develop a computer model of the area using three dimensional model MODFLOW. Once calibrated to the site conditions the model was used to evaluate several potential solutions to control high groundwater levels. A French drain system proved to be the most effective.

JITC Geotechnical Study, WVARNG, Camp Dawson, WV: Geotechnical principal-in-charge responsible for geotechnical study for a planned 3- to 4-story Joint Interagency Training Center (JITC). The planned building will have a footprint of approximately 150,000 square feet and structural loads of 300 Kips and 4.0 KLF for column and wall loads were considered. To develop recommendations for a foundation system to support this building on the relatively soft alluvial soils of the Cheat River Floodplain, 12 borings were advanced to bedrock and 6 were advanced up to 10 feet into bedrock, while an additional 6 borings were completed in parking areas. A deep foundation system consisting of auger cast-in-place piles was recommended to support the planned structure within the dense sands and gravels beneath the site.

Project Experience

02

Project Experience

Master Planning Experience

AECOM brings to the WVARNG capabilities in all of the specific areas of specialized experience and more. Our vast project portfolio includes every facility type and service utilized by the ARNG. Our team's expertise means there is no learning curve, allowing an efficient and cost-effective planning solution. Our current experience includes:

- ARNG Readiness Center Transformation Master Plans (IL, SC, and PA).
- Joint Base Lewis-McChord (JBLM) Master Plan.
- IN ARNG Aviation and Readiness Center Statewide Master Plan.
- Joint Base Lewis-McChord (JBLM) Joint Land Use Study.
- Army Reserve Installation Management Directorate, Regional Support Commands, Vision and Capital Investment Strategy Update, Nationwide.
- And over 250 Master Plans for DoD installations in the last five (5) years implementing the principles of UFC 2-100-01, for both active and reserve component installations.

We have also completed multiple large and small design projects for the National Guard, including:

- Design for over $180M worth of construction for National Guard Readiness Center and HQ facilities.
- Design for over $300M worth of construction for National Guard aviation/hangar facilities.
- Design for over $47M worth of construction for National Guard training and range facilities.
- Design for over $50M worth of construction for National Guard roadway and infrastructure.
- Design for over $5M worth of construction for National Guard base support facilities.

We have unparalleled expertise in implementing the foundational principles of the Installation Master Planning UFC 2-100-01, which are integral to every planning project we undertake. Utilizing our extensive experience, the AECOM team works alongside our clients to guide the dialogue and develop master plans that address ever-changing operations and missions. We have worked extensively with US Army, Air Force, and Navy leadership and collaborated with stakeholders at installations to produce executable master planning products.

Army Reserve Installation Management Directorate, Regional Support Commands, Vision and Capital Investment Strategy Update
Nationwide

Project Description
The Office of the Chief Army Reserve (OCAR), Army Reserve Installation Management Directorate (ARIMD) commissioned AECOM to develop a Vision Plan and Capital Investment Strategy (CIS) update for each Regional Support Command (RSC) within the United States and Puerto Rico. Four RSCs comprise the entirety of the U.S. Army Reserve's (USAR) area of responsibility including the 63rd RSC, 81st RSC, 88th RSC, and 99th RSC. Each RSC oversees, on average, between 250-650 facilities ranging in type based on function from Army Reserve Centers to Area Maintenance Support Activities, Equipment Concentration Sites, Armed Forces Reserve Centers, and Organizational Maintenance Shops. The four Vision Plans and CISs, two reports for each unique RSC, set the comprehensive roadmap and defined the program processes for future development and investment in USAR's facility inventory nationwide. AECOM developed these reports in accordance with Department of Defense (DoD) Unified Facilities Criteria and Department of the Army (DoA) regulations for master planning processes and products.

A successful master plan begins with a vision for development within each RSC. The vision represents the look, feel, and function of the overall RSC facility inventory for the next 20+ years. The Vision Plan developed for each RSC provided USAR leadership with the long-range plan to prioritize the limited financial resources to make the best capital investments possible for each facility and overall RSC. The Vision Plans were crafted over the course of several days of workshops, interviews, and briefings which AECOM facilitated with key stakeholders at each RSC Headquarters. Participants discussed current issues and conditions, the physical and fiscal constraints, the RSC infrastructure, and status of current capital investment plans. Participants then developed a forward-looking vision and narrative of a desired and probable real property end-state using guiding principles for the purposes of developing goals and objectives that direct future development. The vision process identifies the strengths, weaknesses, opportunities, and threats for the RSC facility inventory and builds upon those to develop a vision that seeks to guide future development, mitigate weaknesses, and strengthen assets.

The ARIMD recognizes a fiscally constrained environment and the challenges to implementing future development with respect to facilities across each RSC. Therefore, it is imperative for the ARIMD to identify those facilities in the inventory of the greatest need of improvement with regards to facility development or disposal in order to gain efficiencies, provide cost savings, and prioritize limited funding for mission critical sites.

Location of the Project
Nationwide

Client Contact
Laura Henley
United States Army Reserve
6075 Goethals Road, Bldg. 1908,
ARIMD, Suite 103
Fort Belvoir, VA 22060
T 703.806.6607
E laurie.c.henley.civ@mail.mil

Type of Project
Master Plan/Capital Investment Strategy

Project Goals & Objectives
Ensure that the U.S. Army Reserve makes the best use of facilities; lowering costs through critical analysis of space allocation, excess facilities, and energy use to support the Reserve of the future.

Develop facility management strategies fostering responsible stewardship of resources integrated with other USAR processes to support leadership decisions.

Implement the Army Facility Investment Strategy 2010 via the master planning process.

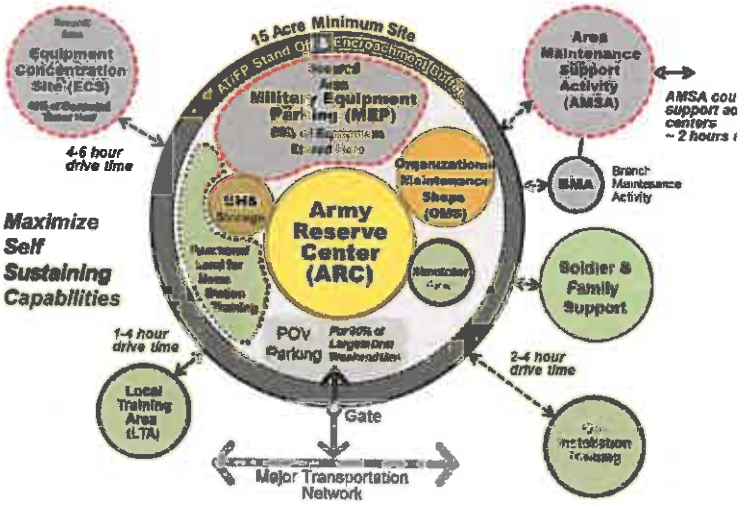
Prioritize facilities for allocation of sustainment, restoration, and modernization or military construction funding for greatest benefit.

Promote the disposal or demolition of excess facilities.

Identify strategies for facilities that support USAR stationing decisions.

Provide criteria for the assessment of leases and the creation of a mitigation plan.

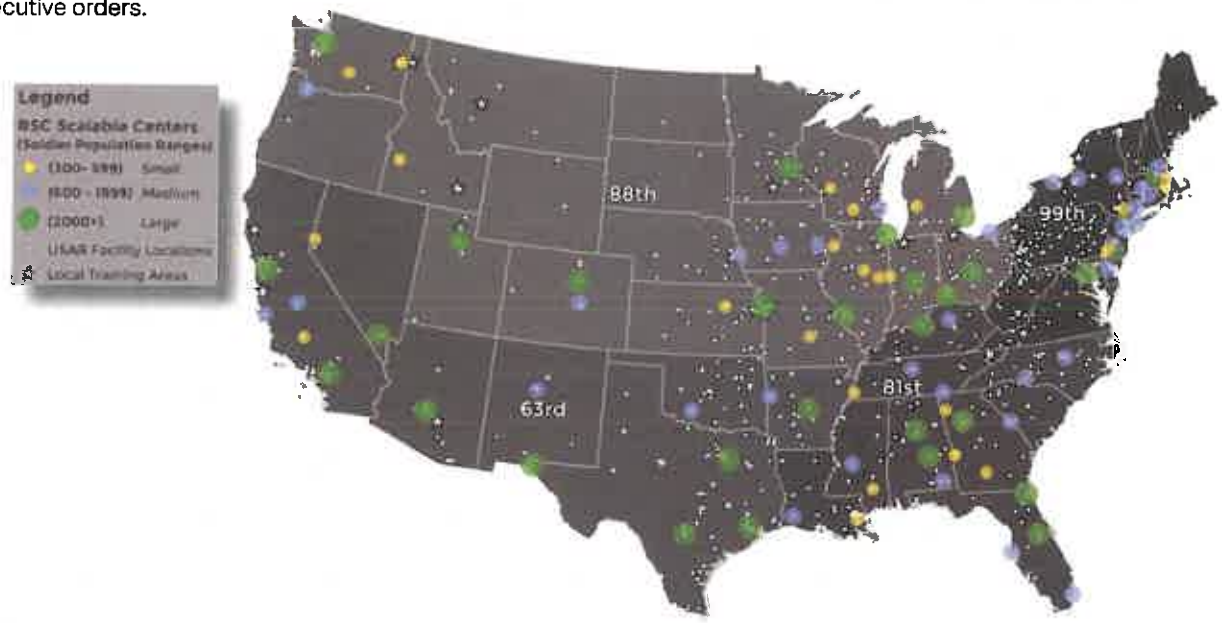
AECOM performed a facility inventory assessment that identified initiatives to reduce Federal spending and assets as well as improve facilities for Reserve Soldiers on a comprehensive nationwide level. Reducing costs while enhancing facilities to meet critical missions and training, is a goal of USAR that the CIS supports through its planning program.



The CIS is the guidebook ARIMD and the RSCs use to identify these sites and facilities, and the proposed planning actions to support the USAR's mission and overall DoA planning objectives. The AECOM produced report provides a unique planning program for decision making based on the USAR's Facility Investment Strategy criteria. It outlines and refines how to apply the existing FIS procedures set forth by USAR and solutions to address facilities that do not meet all FIS criteria. Additionally, it describes how to implement Army strategies and ensures that resources flow from national security objectives to RSC missions, programs, and known requirements for each site and facility to create a sustainable facility inventory. Coupled with this effort, is the need to develop new facilities within strategic locations across the continental U.S. due to shifting population trends as well as mission changes within the Army, which AECOM identified in the CIS planning analysis.

The Army Reserve takes a holistic approach to life cycle management that sustains existing facilities that currently meet "enduring" facility criteria per the FIS, enhances the quality of those facilities located in desired recruitment and operational areas capable of meeting the criteria for an enduring facility, constructs effective replacements to mitigate for critical shortfalls and failing facilities, and reduces facility inventory through disposal of non-enduring facilities that are excess, subject to uneconomical leases, or economically unable to be enhanced to enduring status. The FIS involves the use of six steps or criteria that allows each site and facility to be scored from "worst to first" or poorest to the best conditioned facilities. Using this logical process, AECOM communicated clear recommendations or planning actions in the CIS for USAR to correct deficiencies with its facilities nationwide; provided a list of investment priorities to allocate funds toward annually; and developed an audit process to evaluate progress overtime and reassess where needed to create a sustainable plan and investment strategy.

To accomplish this effort, coordination was needed between all the RSCs as well as ARIMD and AECOM to consistently apply the planning criteria, execute the process, and identify realistic planning actions for each site and facility that sustainably supports the RSC, USAR, Army, and DoD in accordance with federal policies, regulations, and executive orders.



Combined Arms and Amphibious Assault Course (CAAAC) and G-10 Vegetation Clearing Pre-NEPA Planning Study

Marine Corps Base Camp Lejeune, Jacksonville, NC

Project Description
Established in May 1941, Marine Corps Base, Camp Lejeune (MCBCL) provides specialized military training to prepare troops for amphibious and land combat operations. Today Camp Lejeune occupies 153,000 acres, with 14 miles of beach on the Atlantic Ocean, more than 450 miles of roads, 50 miles of railroads, one comprehensive wastewater treatment plant, five water treatment plants, a municipal solid waste landfill, and 6,800 buildings and facilities supporting 144,000 Marines, Sailors, and their families. The Base serves as the 5th Element of the Marine Air Ground Task Force (MAGTF) and is the nucleus of the Marine Corps East Coast force-in-readiness.

A comprehensive analysis for training beyond current platoon level mechanized training and movement can occur on Marine Corps Base (MCB) Camp Lejeune. However, Combined Arms training is currently segmented throughout the Base's training area which is not coherent nor does it advance the principles of MAGTF training. There is a need to establish a range training area (capability) designated for Company to Battalion level Combined Arms mechanized maneuvers that would support individual and unit level training and at least two MEU work-ups a year, Joint Task Force Exercises (JTFEX), and MEU Certification Exercises (CERTEX). This project provided extensive combined arms training alternatives for small arms, machine guns, mortars, wheeled and tracked vehicles, MOUT facilities, live fire shoot houses, and air to ground live fire range training. Additionally, Marines and aviators firing/delivering ordnance into the G-10 range cannot view where their ordnance is impacting via direct observation and aviators have limited time to acquire targets and deliver ordnance, which can result in safety issues. Therefore, larger areas require the clearance of trees. The performed comprehensive analysis and opportunities were completed in a manner such that they are easily transferable to any future NEPA documentation requirements.

Location of the Project
Jacksonville, NC

Client Contact
US Navy, NAVFAC Mid Atlantic
Carol Zurawski
Naval Facilities Engineering Command, Mid-Atlantic
9324 Virginia Avenue
Norfolk, VA 23511-3095
T 757.322.4830
E carol.zurawski@navy.mil

Type of Project
Master Plan

Project Goals & Objectives
Provide MEU and MEB-sized MAGTFs with adequate space and infrastructure to train.

Increase the visibility of targets from the observation posts and the mortar positions to better support fire-support team training. Previously, mortar fire was mostly indirect, conducted with the assistance of a forward observer. However, current warfighting conditions require that Marines receive proper training in the delivery of both direct and mobile mortar fire. This requires visibility of fired rounds and aviation-delivered munitions from the observation posts and mortar positions. Currently, only MP-1 and MP-7 support direct firing. The project should enable mortar teams to engage targets in utilizing the direct lay method as well.

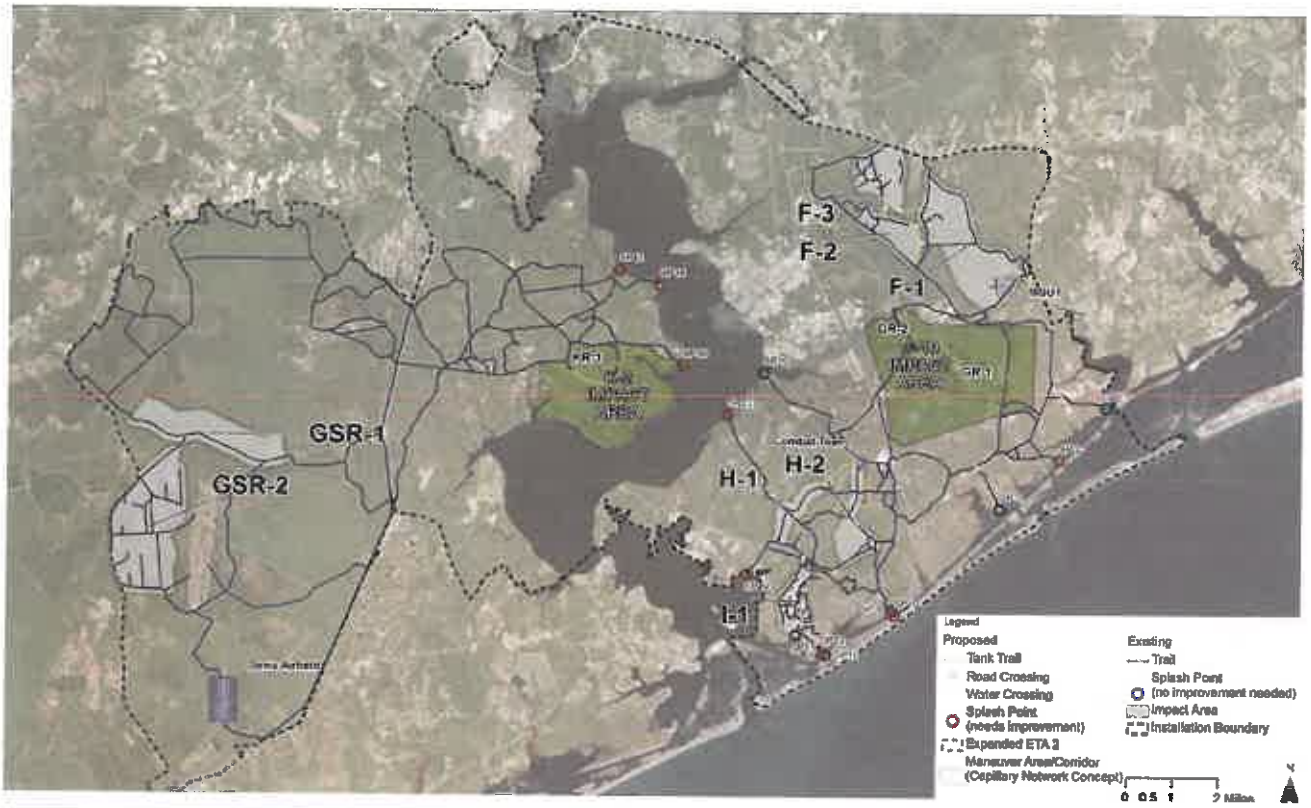
Ensure the visibility of fired rounds from the observation posts and mortar positions, from point of firing to impact, for both on and off target rounds to improve assessment and scoring of fire.

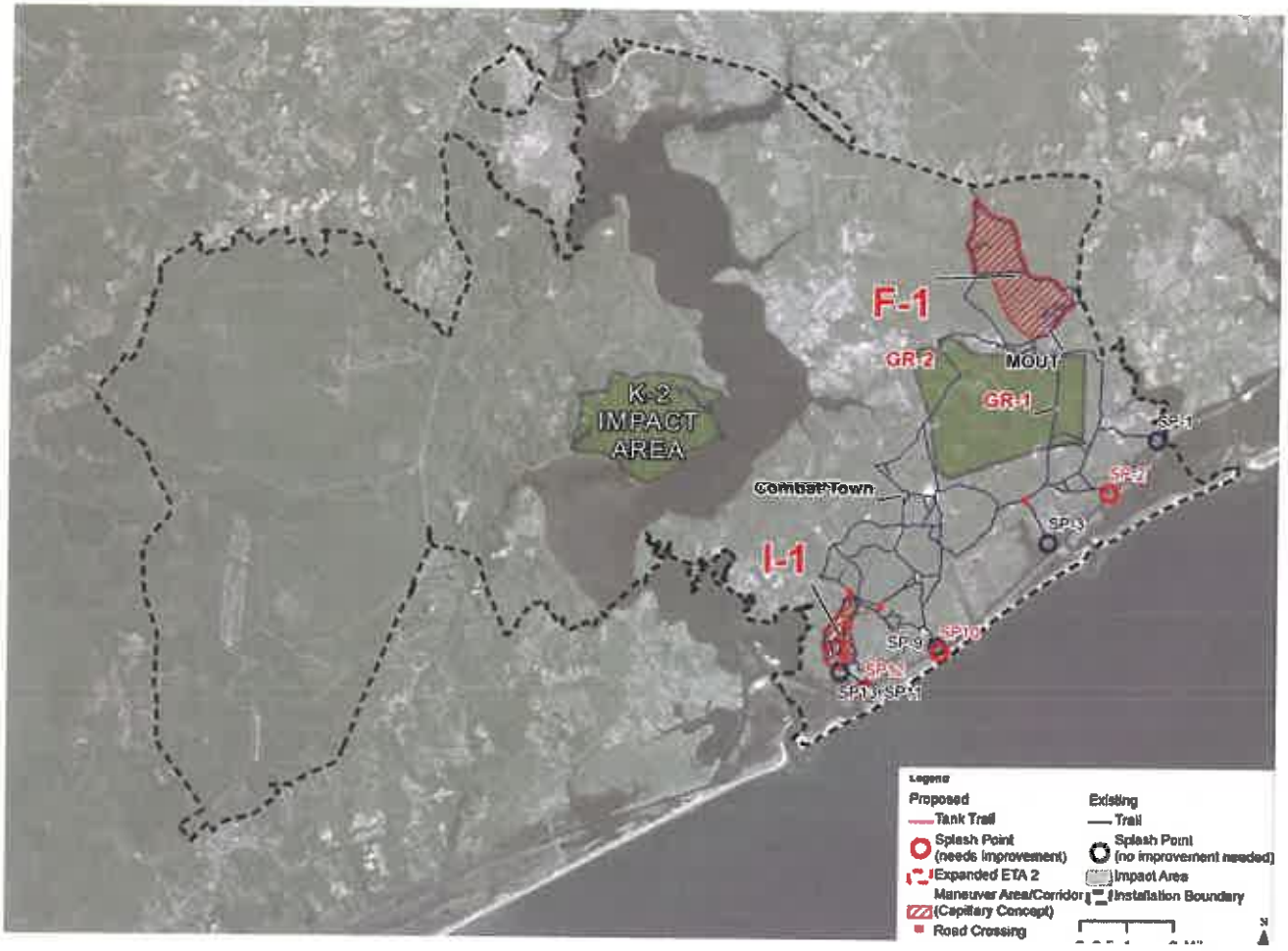
Reduce laser scatter off vegetation to improve laser targeting.

Clearly define the impact/target area for visibility from the air so pilots can see the target sooner and longer.

Provide as large an area as possible in which to place targets and allow for more diverse positioning and repositioning of the targets to present new challenges to the training Marines.
Clearly delineate the outer boundary of the G-10 Impact Area.

Maintain a buffer of vegetation around the area's perimeter to deflect targeting lasers back into the impact area.


F-3
F-2
F-1
GSR-1
GSR-2
H-1
H-2
I-1
Legend
Proposed
Tank Trail
Road Crossing
Water Crossing
Splash Point
(needs improvement)
Expanded ETA 2
Maneuver Area/Corridor
(Capillary Network Concept)
Existing
Trail
Splash Point
(no improvement needed)
Impact Area
Installation Boundary


F-1
GR-2
MOUT
GR-1
K-2
IMPACT
AREA
Combat Town
I-1
SP-1
SP-2
SP-3
SP-9
SP-10
SP-11
SP-12
SP-13
SP-14
Legend
Proposed
Tank Trail
Splash Point
(needs improvement)
Expanded ETA 2
Maneuver Area/Corridor
(Capillary Concept)
Road Crossing
Existing
Trail
Splash Point
(no improvement needed)
Impact Area
Installation Boundary

Army National Guard Readiness Center Transformation Master Plan
SC, IL and PA

Project Description - South Carolina ARNG Readiness Center Transformation Master Plan
The AECOM team met with South Carolina Army National Guard leadership, senior National Guard representatives, additional major stakeholders, as well as multiple user groups to establish a clear vision and goal for the State.

After a four-day workshop with the leadership team, data collection began with an on-site investigation, during which the data collection team interviewed stakeholders, as well as collected existing facility data, stationing data (MTOE and TDA), and GIS site data. Distress-based facility condition assessments were conducted for all readiness centers and supporting facilities on two primary levels. The Level II assessment consisted of a desktop exercise which utilized existing data and interviews to establish building systems conditions. A sample of facilities was selected for field assessments from National Guard leadership for the AECOM team to access. The data collected was then organized and analyzed to be used in the development of proposed courses of action. AECOM representatives remained consistent throughout the process, through finalization of the master plan study. Analyses included a site expansion capacity analysis for each RC, a tabulation of existing and required space analysis, a location and demographics analysis, and an analysis of shared use/partnership potential.

AECOM conducted a second on-site charrette to select options for proposed Courses of Action (COAs) and Capitol Investment Strategies (CISs). AECOM developed the COAs based on the input received during Charrette #2. Baseline conditions, developed COAs, and a hybrid COA were compared using evaluation criteria that include space adequacy, space efficiency, recruiting potential, readiness, command control adjacency, and implementation. Using a scoring system tool, a preferred COA was identified and recommended. Deliverables include a comprehensive report that documents findings such as potential partnering opportunities, recommendation for placement of new RCs, relo-cation of existing RCs, or changes in mission of units, and a prioritized CIS strategy with funding requirements to correct the most critical facility shortfalls.

Due to the tight schedule for this effort, multiple tasks were completed in parallel. Multiple teams performed the individual facility assessments. A central management team was utilized so that lessons learned and best practices could be incorporated into the process. Additional subject matter experts, such as planners, GIS, and 1390-91 specialists were also utilized from offices across the nation to perform a best-of-both worlds (regional and national subject matter expertise) collaborative effort.

Location of the Project
South Carolina, Illinois, and Pennsylvania

Client Contact
MSG Mark Hicks
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Type of Project
Master Plan

Project Goals & Objectives
Establish statewide real property visions for readiness centers.

Develop real property master plans to support the vision.

Achieved a phased and implementable Capital investment strategy that supports the real property master plan.

Our team analyzed 193 Readiness Centers and over 7.4 million square feet of space across the three states.

Project Description - Illinois ARNG Readiness Center Transformation Master Plan

This project involves the same scope as project #1 beginning with the Statewide Master Plan process that began with a visioning and goal setting charrette. The AECOM team met with Illinois Army National Guard leadership, senior National Guard representatives, additional major stakeholders, as well as multiple user groups to establish a clear vision and goal for the State.

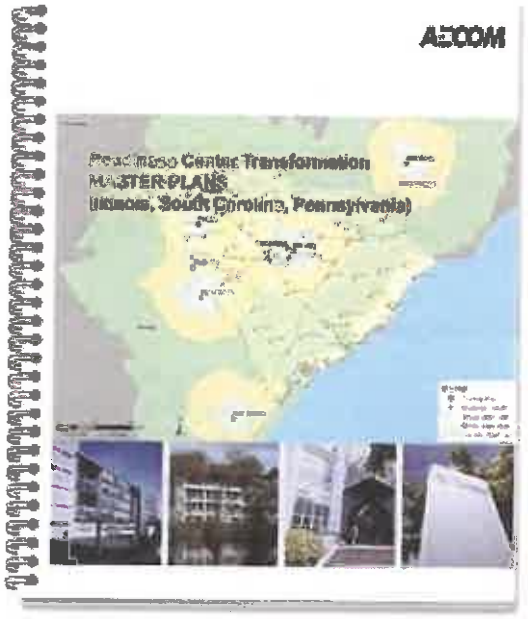
After a four-day workshop with the leadership team, data collection began with an on-site investigation, at which the data collection team interviewed stakeholders, as well as collected existing facility data, stationing data (MTOE and TDA), and GIS site data. Distress-based facility condition assessments were conducted for all readiness centers and supporting facilities on two primary levels. The Level II assessment consisted of a desktop exercise which utilized existing data and interviews to establish building systems conditions. A sample of facilities was selected for field assessments from National Guard leadership for the AECOM team to access. The data collected was then organized and analyzed to be used in the development of proposed courses of actions. AECOM representatives remained consistent throughout the process through finalization of the master plan study. Analyses included a site expansion capacity analysis for each RC, a tabulation of existing and required space analysis, a location and demographics analysis, and an analysis of shared use/ partnership potential.

AECOM conducted a second on-site charrette to select options for proposed COAs and CISs. AECOM developed the COAs based on the input received during Charrette #2. Baseline conditions, developed COAs, and a hybrid COA were compared using evaluation criteria that include space adequacy, space efficiency, recruiting potential, readiness, command control adjacency, and implementation. Using a scoring system tool, a preferred COA was identified and recommended. Deliverables include a comprehensive report that documents findings such as potential partnering opportunities, recommendation for placement of new RCs, relocation of existing RCs, or changes in mission of units, and a prioritized CIS strategy with funding requirements to correct the most critical facility shortfalls.

Due to the tight schedule for most of the efforts, multiple tasks were completed in parallel. Multiple teams were utilized to perform the individual facility assessments. A central management team was utilized so that lessons learned and best practices could be incorporated into the process. Additional subject matter experts, such as planners, GIS, and 1390-91 specialists were also utilized from offices across the nation to perform a best-of-both worlds (regional and national subject matter expertise) collaborative effort.

Project Description - Pennsylvania ARNG Readiness Center Transformation Master Plan

AECOM collected and analyzed data to use in the recommendations for the Nationwide RCTP. Data collection began prior to an on-site charrette at which the AECOM team met with leadership to establish vision and goals for the state and then interviewed stakeholders to collect and confirm data. Facility condition assessments were conducted on two levels. The Level II assessment consisted of a desktop exercise which utilized existing data and interviews to establish building systems conditions. A sample of facilities was selected for field assessments by a team of AECOM architects and engineers. Analyses included a site expansion capacity analysis for each RC, a tabulation of existing and required space analysis, a location and demographics analysis, and an analysis of shared use/ partnership potential. The data collected was then organized and analyzed to be delivered to the NGB Program Management contractor to be used in the development of proposed courses of actions.



Joint Base Lewis-McChord Master Plan

Joint Base Lewis-McChord, WA

Project Description
The AECOM Joint Venture team (JV) was retained by the USACE Seattle District (through the USACE Sacramento District Planning IDIQ) to provide master planning services for the newly formed Joint Base Lewis-McChord (JBLM). Under this task order, the JV provided a multi-disciplinary team to assist personnel at JBLM in a yearlong master planning effort to facilitate the merger of these once separate installations, into a joint base from a land use and functional perspective. As the largest military installation west of the Mississippi River, and the Northwest's Power Projection Platform of the Pacific, JBLM hosts many key missions that are in a state of change, requiring planning for current and future mission readiness. Also, JBLM is a major economic driving force in the South Puget Sound region.

Fort Lewis (including the geographically disparate Yakima Training Center) and McChord Air Force Base merged in October 2010 to form Joint Base Lewis-McChord. The installation has experienced rapid growth in the past decade and required a unified approach to sustainably manage its facilities and resources.

As part of this task order, the team incorporated the existing planning vision from Fort Lewis and unified it with the character and vision of McChord. The team developed a robust Master Plan consisting of a Joint Vision, framework, and a series of Area Development Plans incorporating the new UFC 2-100-01 for Master Planning to create a framework for sustainable growth at JBLM over the next 50 years. The JBLM Master Plan also included several sub-plans to further the integration of JBLM and plan for future expansion:

- Urban Forestry Guide
- Landscape Guide
- Low Impact Development Guidelines
- Utility Infrastructure Plan (with cost estimates)
- Air Installation Compatible Use Zone (AICUZ)
- Installation Operational Noise Management Plan
- GIS Implementation of all Area Development Plans

Sustainability strategies are incorporated in all aspects of this master plan to enable coordination of plans, development and construction to adhere to the installation's planning and sustainability goals.

Critical to the development of this master plan was the identification of areas of "jointness" and the development of an implementation plan to take advantage of these areas and eliminate redundancies and inefficiencies. A weeklong charrette was dedicated to identifying the themes that serve to unify JBLM. The charrette brought together a diverse group of stakeholders, from both the Air Force and Army operators to family members to the dedicated staff of JBLM, and resulted in the identification of numerous operational and physical opportunities for "jointness."

Location of the Project
Joint Base Lewis-McChord, Washington

Client Contact
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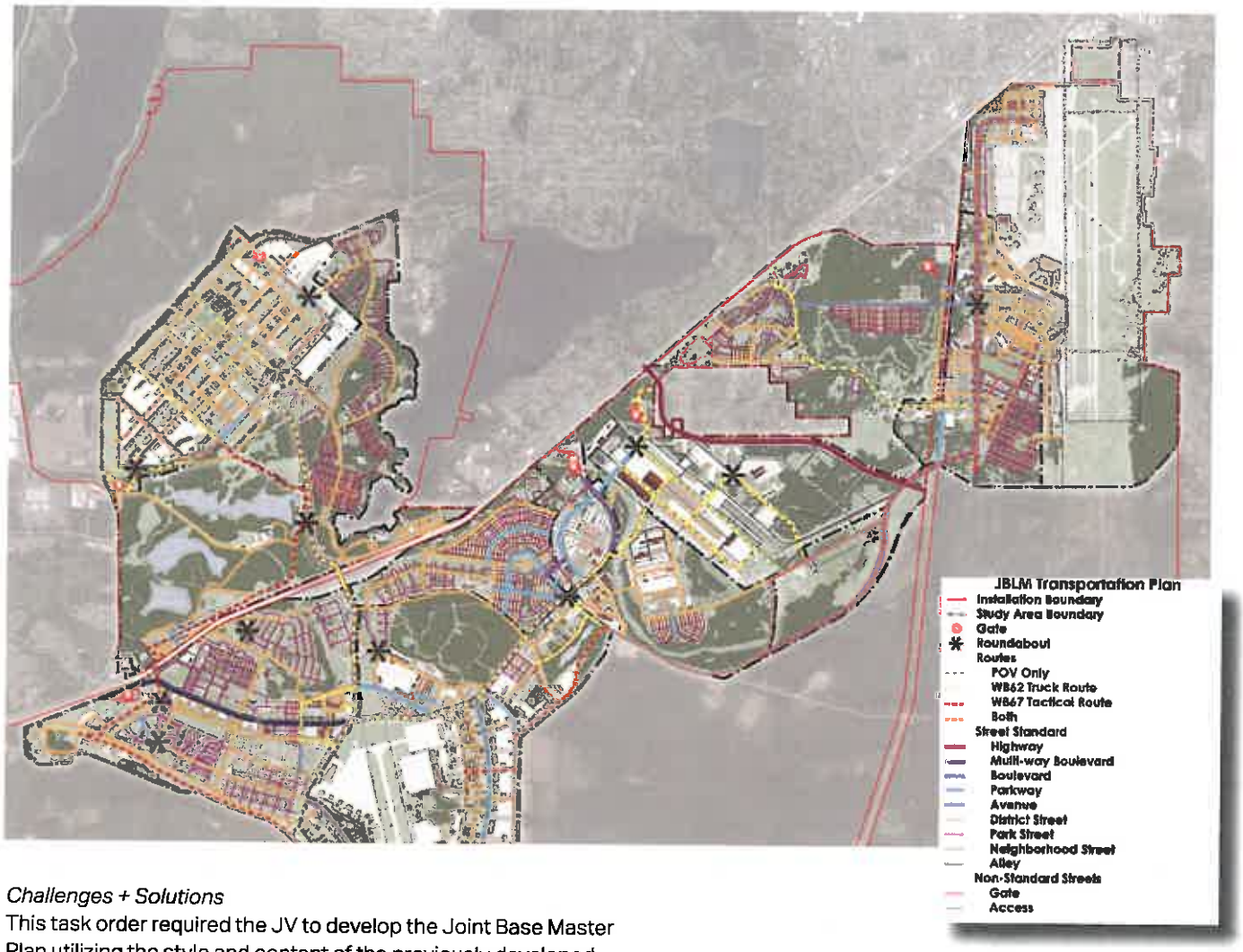
Type of Project
Master Plan

Project Goals & Objectives
Help facilitate the merger of Fort Lewis (including the geographically disparate Yakima Training Center) and McChord Air Force Base.

Develop real property master plan that enables installation leaders to sustainably manage its facilities and resources.

First UFC 2-100-01 Compliant Joint Base master plan.

Identification of numerous operational and physical opportunities for "jointness."



Challenges + Solutions

This task order required the JV to develop the Joint Base Master Plan utilizing the style and content of the previously developed Fort Lewis Master Plan while incorporating McChord AFB into the document. The JV team conducted an analysis of the existing master plan, determined areas where the new planning UFC might require an update in content, developed a list of needs for both Fort Lewis and McChord AFB and designed an approach to acquire the data through a participatory charrette process to accomplish these goals.

Value Added

Conducting the Utility Master Plan and AICUZ plan alongside the master plan allowed the team to incorporate findings from all three documents (Utility MP, AICUZ and JBLM MP) and enabled the Utility and AICUZ data to shape the master plan in a more substantial way.

West Virginia Army National Guard Joint Interagency Training and Education Center (JITEC)

Camp Dawson, Kingwood, WV

Project Description
AECOM, in association with a local firm, provided architectural and engineering design services for the Joint Interagency Training and Education Center (JITEC), an Army National Guard campus-style facility for training and operational mission support. Sited on 30 acres at the northern end of Camp Dawson between the Cheat River and the foot of Brier Mountain, this 289,000-SF project included the design of a new operations building; creation of a new base entry checkpoint and processing facility; expansion of the billeting (hotel) facility; renovation of the training facility; and design for walkway connectors between all the facilities.

The project began with a review of the existing base master plan, followed by a revision of the master plan concept. JITEC is a training and educational facility—the vision behind the site design and updated master plan was that of a college campus atmosphere. The master plan design created a campus environment that integrated existing buildings with new facilities by using compatible, yet distinct building materials.

The scale of the project included several miles of roads, parking, and utility upgrades affecting the entire base, thus the project was phased over a four-year construction period. Simultaneous construction of all of the new facilities, as well as phased construction in existing buildings, minimized the disruption to operations. The expanded and renovated campus was designed to meet all AT/FP criteria and achieved LEED Gold certification.

The new 92,000-SF operations building is prominently sited as the main focal point upon entering Camp Dawson through the secure access control point and visitor's center, also designed by AECOM. The building's exterior complements its West Virginia setting. Security requirements for the command center influenced the design of the attached, copperclad "black box" that is homage to the native rock stratification seen throughout the state. The building consists of four distinct areas: the Operations Building, which contains the Joint Operations Center; a suite of secure training rooms; base headquarters and JITEC administrative offices; and a 6,000-SF server and telecommunications room.

The 180,000-SF billeting (hotel) expansion more than tripled the facility size and increased the total capacity from 189 guest rooms to 600 guest rooms and suites.

Location of the Project
Camp Dawson, Kingwood, WV

Client Contact
Colonel Bill (William) Suver
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Type of Project
Master Plan

Project Goals & Objectives
Create an energy efficient campus environment to support the Army National Guard training and operational mission with a design that integrates existing buildings with new construction.

A military campus built to AT/FP standards and SCIF spaces including a state-of-the-art command center, work and conference areas with secure video conferencing capabilities, and a 6,000-SF network server room.

The 82,000-SF operations building is prominently sited as the main focal point upon entering Camp Dawson through the secure access control point and visitor's center.

LEED-NC v2.2 Gold certified operations building features a cool roof that reflects solar radiation to keep cooling requirements down and to diminish the heat island effect.

Awards
2011 Honor Award in Concept Design category, American Institute of Architects, West Virginia Chapter

Joint Interagency Training and Education Center (JITEC), Camp Dawson, Kingwood, WV

2013 Honor Award, Engineering Excellence Awards, American Council of Engineering Companies of Metropolitan Washington (ACEC/MW)

Army National Guard Readiness Center
Arlington, VA

Project Description
The new Army National Guard Readiness Center presented the AECOM team with a number of design challenges and opportunities: how to accommodate 250,000 SF of program space on a highly restricted site plan while preserving the natural beauty of the existing landscape; meeting highly restrictive force protection setback requirements; and creating an architecture worthy of the National Guard's mission in the 21st century. The innovative design solution translates these restrictions into opportunities for beauty, security, and meaning to users and visitors alike, creating a compelling symbol of national resolve in the face of a complex and expanded mission.

As a result of Base Realignment and Closure, key elements of the Army National Guard Headquarters and Readiness Center and the National Guard Bureau Joint Staff will relocate to a new $128 million facility on a 15-acre secure campus in Northern Virginia. The design solution is defined by a triangular, crystalline tower rising from a green podium. Nearly 150,000 SF of highly secure spaces are contained in three below-grade plaza levels, with 100,000 SF rising above in a five-story tower. The tower, which appears to rise directly out of the landscape, occupies the plan footprint beyond the force protection setback requirements, and therefore can be largely glazed. Rather than creating a fortress, the solution projects a highly integrated image of landscape and building in which security restrictions play no visible role.

Placing the command center and related secure spaces below grade, projecting into the force protection setbacks, provides long-span, highly flexible space for the many special mission requirements that do not require daylighting. Integrating these spaces with the landscape preserves the park-like outdoor spaces for the users. The design team took great care to create strong links from within the tower to the landscape, as well as from the below grade spaces to the site topography. With a 24/7 mission, visual connection to the out-of-doors offers special benefits.

Location of the Project
Arlington, VA

Client Contact
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Program Manager
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Type of Project
Master Plan
New Construction

Project Goals & Objectives
Design of a new joint command center using a highly innovative approach to integrate landscape and security design resulting in a seamless campus.

Accommodated 250,000 square feet of program space on a highly restricted site plan while preserving the natural beauty of the existing landscape, meeting highly restrictive force protection setback requirements, and creating an architecture worthy of the National Guard.

The innovative design solution translates site restrictions into opportunities for beauty, sustainability, security and meaning to users and visitors alike, creating a compelling symbol of national resolve in the face of a complex and expanded mission.

Awards
2011 Washington Building Congress Craftsmanship Awards, Sheeting and Shoring

2011 Washington Building Congress Craftsmanship Awards, Cast-in-Place Concrete

SEAOC 2011 Excellence in Structural Engineering Awards Program, Award of Merit, New Construction Category

2012-2013, ACEC Engineering Excellence Grand Award

LEED Gold Certified

Air National Guard Readiness Center
Joint Base Andrews, MD

Project Description
AECOM provided master planning, architectural design, structural engineering, LEED consultation, program management, and commissioning services for the four-story, 170,000 SF expansion of the Air National Guard (ANG) Readiness Center building. The $75 million project includes administrative office areas, conference spaces and a cafeteria. The project began as a $22 million facility but, due to the 2005 Base Realignment and Closure (BRAC) and the resulting increase in building population, the scale has more than doubled.

A contemporary statement featuring large expanses of curtainwall and exposed structural elements, the expansion will create a bold contrast with the existing ANG facility while also complying with the Andrews Air Force base architectural and planning standards. The dynamic balance of the materials palette of the existing building and the addition will produce a unifying element of harmony to create a new campus environment for ANG.

The project site covers approximately 32 acres and accommodates parking for 1,000 cars, a memorial grove, and a plaza between the new and existing buildings. Site constraints include surrounding wetland areas and existing infrastructure that must be upgraded. The facility meets force protection setbacks per UFC 4-010-01 and 4-010-02 (October 8, 2003) DOD Minimum Antiterrorism Standoff Distances for Buildings.

The project achieved LEED-NC Silver certification. An extensive (shallow) green roof, the first on an ANG facility, retains a significant portion of rainwater and reduces thermal impact.

Location of the Project
Joint Base Andrews, MD

Client Contact
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Type of Project
Master Plan
New Construction

Project Goals & Objectives
Design of a campus and facility to promote a modern work environment that set the standard for Air National Guard (ANG) facilities at bases nationwide.

Rather than mimic the existing building, the new addition reflects the transformational ANG of the future driven by responsiveness, flexibility, and maximum efficiency.

The 32-acre site accommodates parking for 1,000 cars, a memorial grove, and a plaza between the new and existing buildings.

An internal campus street acts as a spice tying existing and new programmatic components into one fully integrated cluster.

Awards
2008 Honor Award, US Air Force Design & Construction Awards

2011, NAIOP MD/DC Chapter, Award of Excellence, Best Suburban Office, 1-4 Stories

2011 ENR New York, Best Projects of 2011 Awards, Award of Merit, Government/Public Building Category

2012 Citation Award, Facility Design Category, US Air Force Design Awards Program

LEED Silver Certified

The ANG design team earned an Innovation in Design credit for exemplary performance in water use reduction, surpassing the original credit requirements of 20 percent and 30 percent reduction of water use for Water Efficiency Credit 3.1 and 3.2: achieving over 40 percent reduction in water use. The team adopted a number of strategies to meet this credit, including very low-flow urinals, dual-flush toilets, automatic faucets and low-flow showers.

All moveable walls, systems furniture and task seating were selected with GREENGUARD® product certification for low emitting interior building furnishings and finish systems.

AECOM provided fundamental building commissioning for this project, which also pursued enhanced commissioning.

ANG is using the Readiness Center expansion as a demonstration project, re-addressing engineering technical letters (ETLs), embracing current technologies and best practices and showing the flexibility to adapt individual facilities to their climates. This reevaluation, a pioneering effort by ANG, embraces new developmental criteria facilities construction, improving delivery of sustainable building types. With ANG's large building inventory in all 50 states, adopting sustainable practices and policies will lead to increased return on investment dollars through better materials and lower operations and maintenance costs.

Installation Master Plan for Marine Corps Air Station Beaufort
Beaufort, SC

Project Description
Marine Corps Air Station (MCAS) Beaufort is located in Beaufort, South Carolina, approximately 50 miles south of Charleston, SC and approximately 40 miles north of Savannah, Georgia. The Air Station encompasses 5,840 acres just outside the City. A principal remote site is the Townsend Bombing Range, a 33,869 acre bombing range located 70 miles southwest of Beaufort in McIntosh County, Georgia. MCAS owns and controls this range and the Georgia Air National Guard has been the range operator, but recent land acquisitions now indicate the entire range is under the control of MCAS Beaufort Range Operations.

The overall Installation master plan is developing training and compatible uses for the Range complex and AECOM has recently completed a series of Area Development Plan workshops to consider the future uses and development potential of all Air Station Assets including the Range Complex. The recent acquisition of over 28,000 acres provides an opportunity for aviation training for F-35 and other Combined Arms training that has not been available to the Marine Corps within the region previously.

Location of the Project
Beaufort, SC

Client Contact
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E Thomas.d.bennett@navy.mil

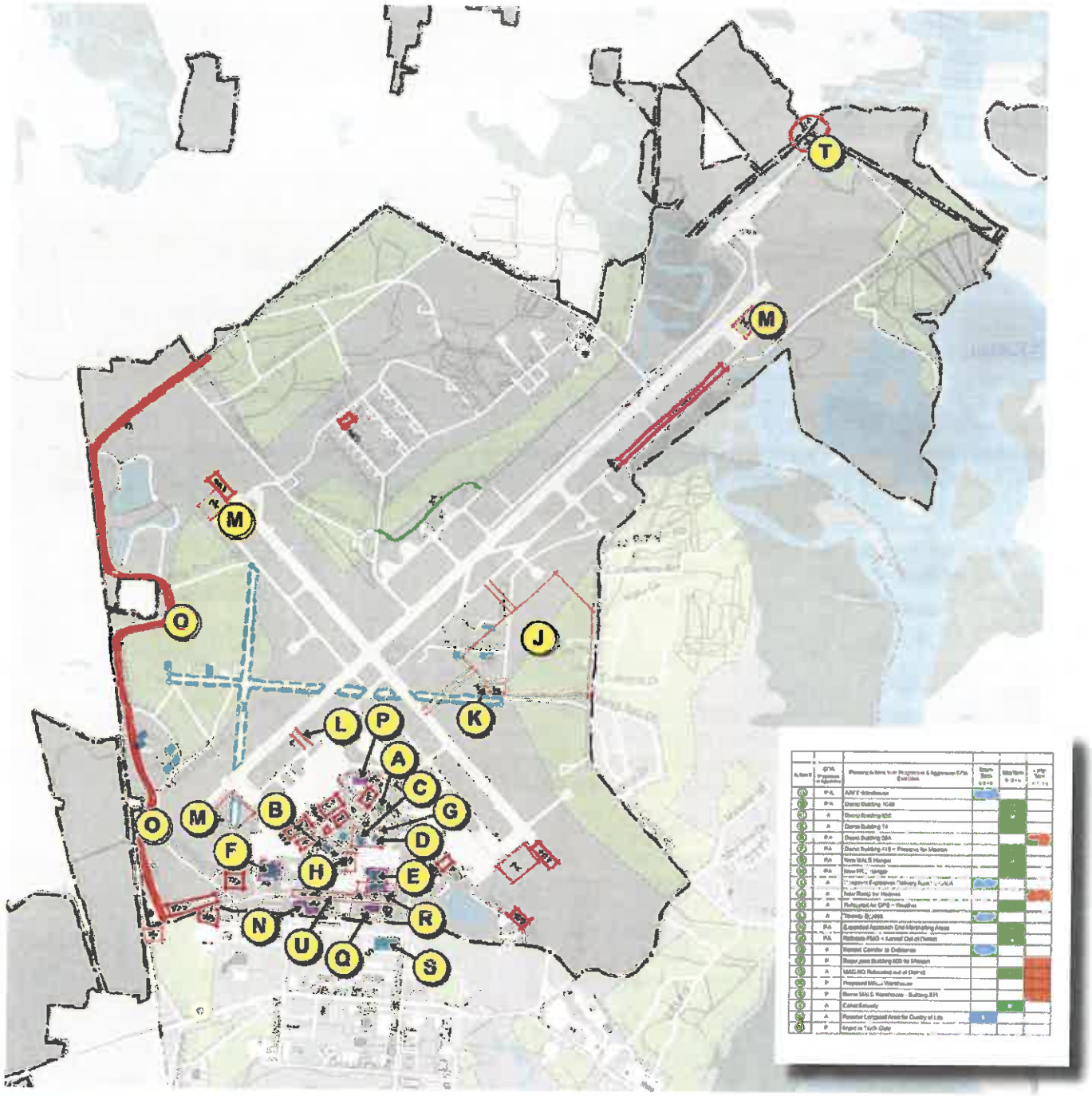
Type of Project
Master Plan

Project Goals & Objectives
Serve as the premier operational facilities & ranges for the USMC.

Foster safe and secure campus environment.

Provide sustainable, innovative, and flexible infrastructure.

Promote, pursue, create, and enhance sense of community.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Installation Master Plan and Area Development Plans for Marine Corps Logistic Base Albany
Albany, GA

Project Description
As a component of the supporting establishment, Marine Corps Logistics Base Albany (MCLB Albany) Located in Albany Georgia encompasses approximately 3,619 acres and provides facilities, infrastructure and a range of tailored support services enabling supported commands aboard the installation to accomplish their assigned missions in support of the warfighter. Within capabilities, MCLB Albany is also prepared to serve as a designated safe haven for the Marine Corps and other Department of Defense agencies including the Georgia National Guard within the southeast and gulf coast regions during times of threat and recovery from destructive weather and emergency situations. The Installation Master Plan (IMP) for MCLB Albany analyzes, extracts, and updates pertinent elements of existing planning documents such as natural resources, land use, real property vision with future development and consolidation opportunities to improve and preserve mission essential components.

A comprehensive analysis of physical planning and infrastructure issues was necessary as part of the IMP at Marine Depot Maintenance Center (MDMC), MCLB Albany, changes in personnel and loading have generated new requirements affecting the Marine Corps' physical presence at MCLB Albany. Accordingly, a comprehensive assessment reflecting current conditions was necessary as an Area Development Plan (ADP) for MDMC, MCLB Albany by analyzing, extracting, and updating pertinent elements of existing planning documents. A special sub-planning effort located five alternative sites for a relocated Georgia National Guard Base to be potentially located on or within the MCLB Base proper. The alternative sites were vetted with the National Guard Leadership as well are Marine Corps facility planners and a preferred site was selected.

MDMC repairs, rebuilds, and modifies all types of Marine Corps ground combat equipment, and combat support and combat service support equipment. The center also provides inspection and repair on all Marine Corps equipment, preparation for shipment and care-in-store support to the remote storage activity, and calibration support to various Marine Corps customers.

Location of the Project
Albany, GA

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E Thomas.d.bennett@navy.mil

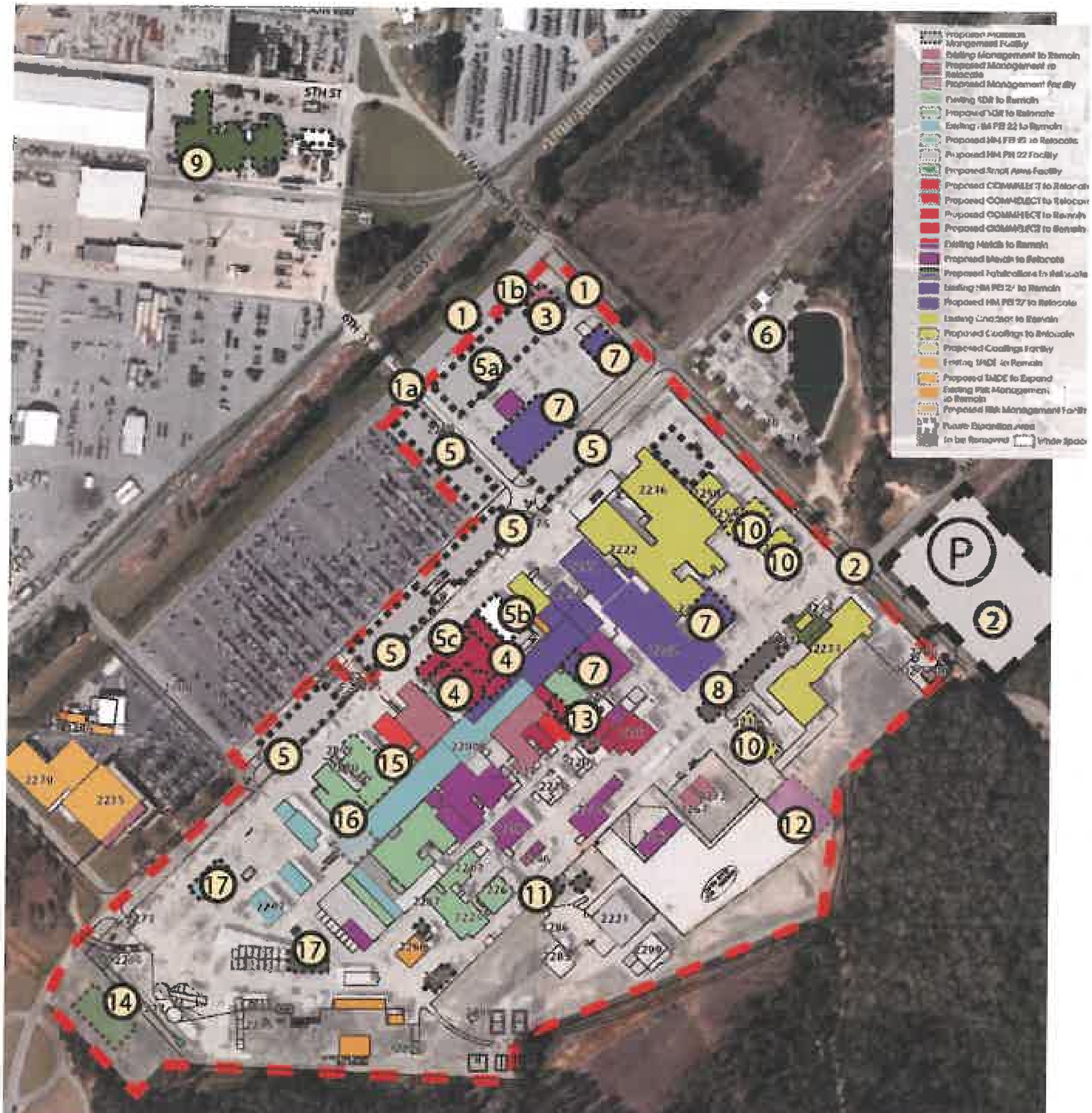
Type of Project
Master Plan

Project Goals & Objectives
Focus on long-term redevelopment and construction projects needed to fulfill mission requirements.

Promote campus-like integration.

Develop modernized infrastructure to enhance efficiency and sustainability.

Increase installation safety and security.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Technical Approach and Methodology; Proposed Management Plan; and Quality Control and Cost Control Plans

03

Technical Approach and Methodology

We are pleased to submit our qualifications to the State of West Virginia Purchasing Division, for consideration to develop your Real Property Master Plan for the Camp Dawson Training Center.

AECOM brings to the West Virginia Army National Guard (WVARNG) in-house capabilities for planning a wide range of facility types. We offer the WVARNG a team that fully understands your organizational structure, mission, and contractual rules and regulations. AECOM has performed more than 150 task orders (TOs) for A/E services for the National Guard and NGB since 1994 under four consecutive IDIQ contracts, including master planning services. Our planning, design, and construction support work has included readiness centers, headquarters facilities, vehicle maintenance facilities, hangars and aviation support facilities, warehouse and base support facilities, and roadways and infrastructure—all building types and services in the Army National Guard inventory.

The AECOM Advantage

Successful history and established relationship as a trusted advisor to the NGB.

NGB experience in all 50 states and the US territories.

20 years of continuous service to the NGB and the National Guard.

Performed more than 150 TOs for the NGB since 1994.

100% dedicated and responsive team.

Project Workplan and Methodology

1.0. Project Initiation

Project initiation establishes a baseline understanding for all of the project's stakeholders. Leading up to AECOM's site visit for the project kickoff, we will work with the WVARNG Point of Contact (POC) to identify key stakeholders to be involved at the initial kickoff meeting, as well as other stakeholders that may become involved throughout the duration of the overall project. At the same time, AECOM will work with the WVARNG POC to acquire as much relevant data (RPLANS, ASIP, existing planning studies, etc.) as possible. AECOM will analyze the existing data in preparation for the stakeholder interviews and include relevant information in the kickoff presentation. A broad review of the requirements will be included in the presentation to understand the requirements program at WVARNG.

AECOM will begin the first site visit with a formal kickoff presentation. Subsequently, the planning team will proceed to collect additional baseline data and perform stakeholder interviews.

2.0. Site Analysis/Confirmation/Validation

The Camp Dawson Training Center Master Plan (CDTCMP) will require time on site to validate existing conditions and solicit input from project stakeholders related to future development opportunities. A one-week site visit is planned, including a project kickoff presentation on the first day. AECOM will work with the WVARNG POC prior to the site visit to identify project stakeholders and establish the work schedule for the week in the field. An agenda will be prepared and sent to project stakeholders in advance to provide enough lead time for stakeholders to reserve time in their schedules to attend the planning sessions. Tasks that will occur during the week include windshield tour/ key facility visits, site photography, stakeholder interviews, review of requirement program, and identification of development constraints and opportunities.

3.0. Visioning Workshop

The Vision Workshop for the Camp Dawson Training Center Master Plan (CDTCMP)will assist WVARNG leadership to determine what their real estate portfolio should look like beyond 20 years. Prior to the charrette, AECOM will discuss with the WVARNG POC to identify key individuals who should participate in the hands-on and collaborative workshop. A two-day workshop agenda will be created to review baseline data, develop the vision statement, and create goals and objectives. AECOM will have a team to facilitate break-out groups during the charrette. The outcome of the charrette will be summarized in a Charrette Summary Workbook.

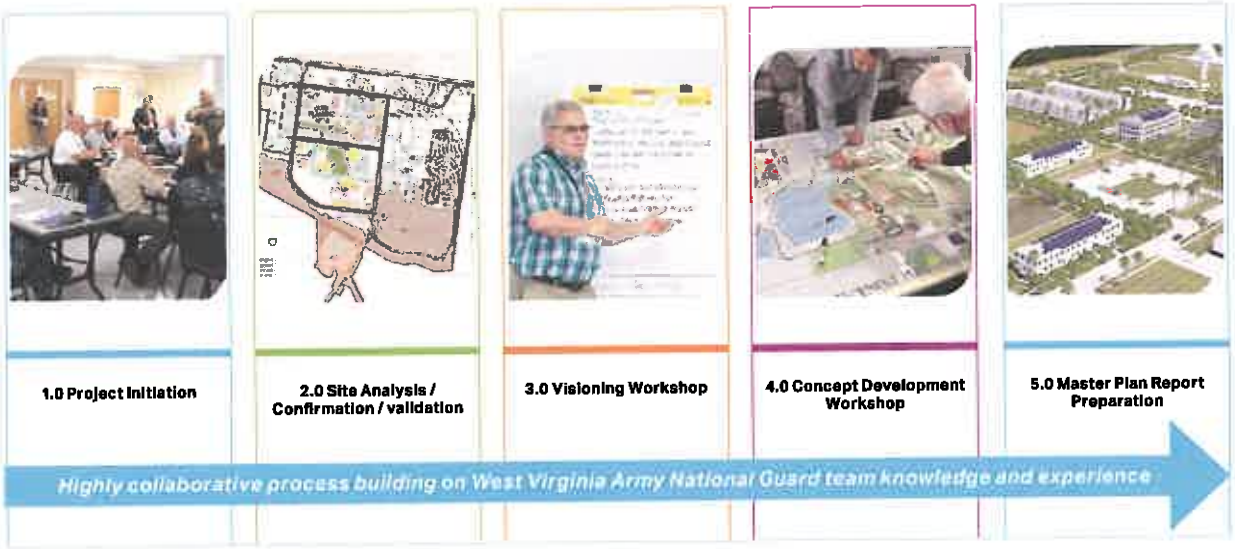
4.0. Concept Development Workshop

The Concept Development Workshop for CDTCMP will develop potential solutions and physical development approaches for addressing requirements program deficiencies to meet mission requirements. Multiple courses of actions (COAs) will be developed for the planning drivers as previously established by the stakeholders and will be influenced by the CDTCMP vision, goals, principles, and analyses as conducted as part of the overall master planning process. COA's will depict different physical arrangements of the base's components through variation in land utilization or density levels, or they could be based upon broad development preferences (renovation or new construction) or themes (land use, circulation network, utilities). Camp Dawson's leadership will evaluate which COA's or components thereof, best fulfill solutions for requirements deficiencies and future mission requirements and with the vision of the future state of Camp Dawson during an interactive concept workshop. AECOM will facilitate the workshop engaging the stakeholders throughout the process to develop a preferred course of action.

5.0. Camp Dawson Training Center Master Plan Report Preparation

Phase 5 consists of creating the CDTCMP report. It will be separated into 3 phases (Draft, Pre-final, and Final) to provide stakeholder input throughout plan development. With each submittal, the plan will become more refined as additional data is acquired and planning actions are further developed. At the Draft stage, the focus is on content and getting the baseline data correctly represented. After the Draft submittal, AECOM proposes a comments review meeting at Camp Dawson to review comments that require more in-depth analysis. The outcome from the Government comments review will be incorporated into the Pre-final submittal. Upon completion of this phase, AECOM will develop a PowerPoint presentation that summarizes the CDTCMP and brief Camp Dawson leadership.

Project Approach Diagram



Concpet Workshop

Proposed Management Plan

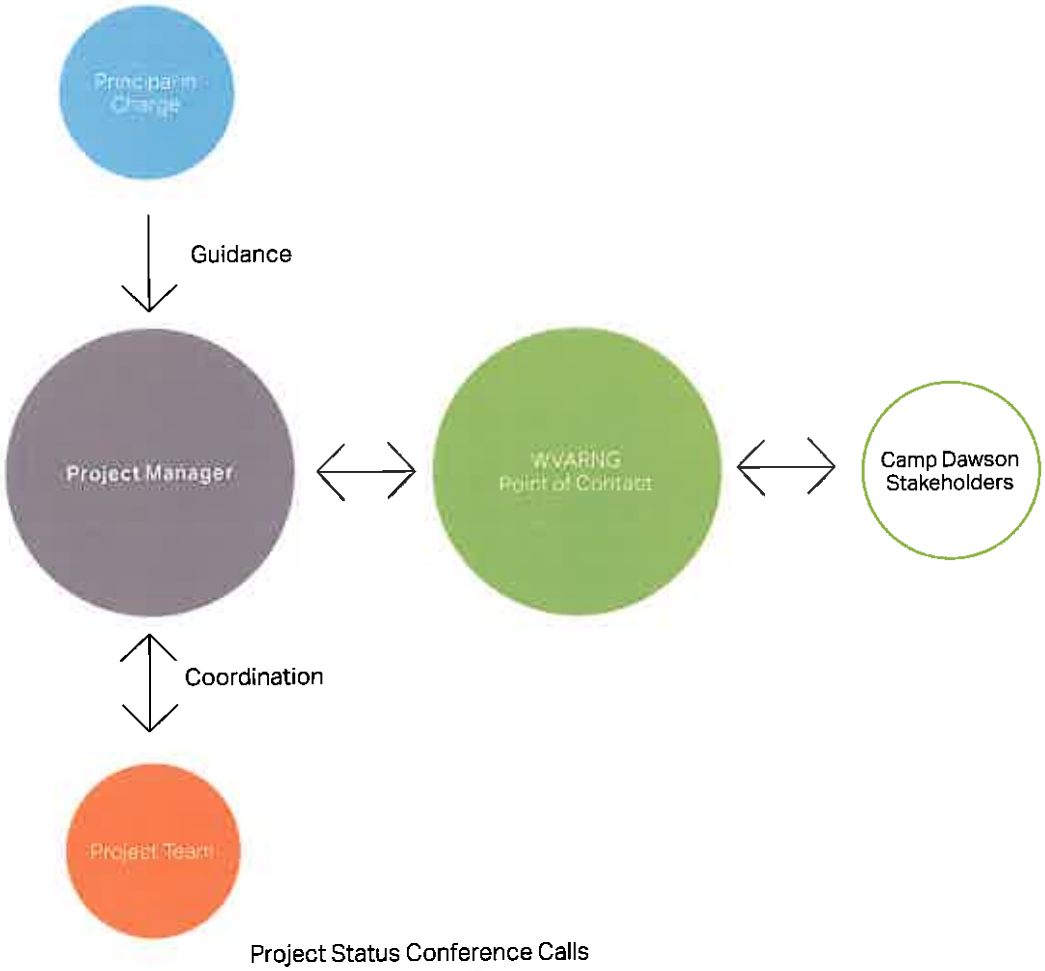
The project management of the CDTCMP is under the direction of Greg Ault, the Principal in Charge, with support from Layel Pallesen as project manager. This leadership team enjoys a strong working relationship and brings a range of skills to successfully develop the CDTCMP.

We are organized so that resources are available to support Ms. Pallesen as the project manager for day-to-day execution of this contract. All project tasks and communication will be coordinated by Ms. Pallesen to provide the WVARNG POC one AECOM representative to work with throughout the master plan process.

As the project manager, Ms. Pallesen will conduct regularly scheduled project management calls to discuss project status, highlight upcoming milestones, and any issues with the project. These calls are invaluable as they keep the WVARNG POC advised of the status of the project and awareness of any potential issues that need to be addressed. In addition, a monthly written progress report will be provided with the project status, upcoming milestones, and issues with the project.

If AECOM is selected to develop the Camp Dawson Training Center Master Plan, Mr. Ault and Ms. Pallesen will begin the project initiation process. They will work together to develop a project schedule that works for the WVARNG, as well as the project team.

Project Management Plan Diagram



Quality Control and Cost Control Plans

Quality Control Plan

AECOM's Quality Management System (QMS) serves as the company's baseline or "umbrella" minimum quality standard under which all work for the DoD is planned, performed, and assessed. QMS is based on the internationally recognized ISO 9001 Requirements for Quality Management Systems.

Initiating quality: Quality begins with AECOM's understanding of your project goals and objectives, emphasizing communication with the WVARNG POC and a thorough review of project inputs. We have identified technically qualified and experienced personnel to produce and review the work for WVARNG. Our initial planning and scheduling activities, including defining the various project work tasks and associated quality activities, are foundational to a successful project.

Producing quality: AECOM requires a project work plan on all projects to define key parameters and guide the work of the team. The plan is discussed at the internal project team kickoff meeting and updated as needed to inform the team of new developments. As work proceeds, a number of critical technical activities are undertaken, including:

- Proper application of codes, standards, and design criteria.
- Ongoing oversight and supervision for accuracy, completeness and scope adherence as work proceeds.
- Distribution of in-progress documents at defined intervals for quality review.
- Coordination among disciplines.
- Verification of compatibility and consistency among document types, such as drawings and specifications.
- Resolution and closure of in-progress review comments.

Confirming quality: While it is important to build quality into the work as it is performed, formal checking and reviewing are critical QMS activities. Quality checking activities, which are all documented with approvals, include:

- Checking studies/reports for content, logic, clarity and soundness of recommendations, as well as grammar, punctuation and format.
- Checking calculations to verify correctness and completeness of mathematics, methodology, application of standards and codes, and general approach.
- Checking drawings and maps within each discipline to confirm design layout, dimensions and details. Potential interferences, conflicts and interface issues are resolved through interdisciplinary reviews.

Delivering quality: All deliverables undergo a final verification check before they are submitted. An independent reviewer evaluates the deliverable for completeness and consistency, adherence to quality requirements, and resolution of comments. The reviewer then digitally signs a deliverable release form and transmits it to our project manager, who is then responsible for the final overlook, approval and submittal.

Improving quality: A key component of AECOM's quality program and ISO 9001 is continuous improvement. We learn from our experiences and apply those lessons to future work through a formal, iterative process. The true focus of this process is to generate client satisfaction, one of AECOM's core values.

Cost Control Plan

Once the project fee is established, the project manager will work closely with the Principal in Charge to develop a project budget and allocate resources appropriately for each required task. AECOM has an internal project management system that enables all project managers to develop a cost control plan to monitor and control their budgets effectively. It is the responsibility of the project manager and Principal in Charge to conduct monthly reviews of the cost control plan ensuring each task is completed on time and within budget. The monthly invoice will also include a project progress report that provides cost details by tasks and the percentage complete for the WVARNG POC to review and approve.

Quality begins with AECOM's understanding of your project goals and objectives.

Terms and Conditions
Required Forms

06

Terms and Conditions Form: Designated Contact / Certification and Signature

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

Barbara Landry, Senior Contracts Manager
(Name, Title)
Barbara Landry, Senior Contracts Manager
(Printed Name and Title)
19219 Katy Freeway, Houston, TX, 77094
(Address)
Phone - 281-267-2789, Fax - 281-646-2401
(Phone Number) / (Fax Number)
barbara.landry@aecom.com
(email address)

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

AECOM
(Company)

John Bachmann, Associate Vice President
(Authorized Signature) (Representative Name, Title)

John Bachmann, Director Design, Planning + Economics
(Printed Name and Title of Authorized Representative)

August 29, 2017
(Date)

Phone - 703-682-4970 Fax - 703-682-4901
(Phone Number) (Fax Number)

Revised 07/07/2017

Addendum Acknowledgement Form

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CEOI ADJ1800000002

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

☐ Addendum No. 1	☐ Addendum No. 6
☐ Addendum No. 2	☐ Addendum No. 7
☐ Addendum No. 3	☐ Addendum No. 8
☐ Addendum No. 4	☐ Addendum No. 9
☐ Addendum No. 5	☐ Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

AECOM
Company

John Bachmann, Associate Vice President
Authorized Signature

August 29, 2017
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

Revised 07/07/2017

Purchasing Affidavit

RFQ No. _____

STATE OF WEST VIRGINIA
Purchasing Division

CEOI 0603 ADJ1800000002

PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

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

DEFINITIONS:

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

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

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

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: AECOM

Authorized Signature: _____ Date: August 29, 2017

State of Virginia

County of Arlington, to-wit:

Taken, subscribed, and sworn to before me this 29 day of August, 2017.

My Commission expires November 30, 2018.

AFFIX SEAL HERE

VALERIE PETTY NOTARY PUBLIC COMMONWEALTH OF VIRGINIA REG #317440

NOTARY PUBLIC Valerie Petty

Purchasing Affidavit (Revised 07/01/2012)


CAMP DAWSON
WEST VIRGINIA ARMY NATIONAL GUARD

About AECOM
AECOM is built to deliver a better world. We design, build, finance and operate infrastructure assets for governments, businesses and organizations in more than 150 countries. As a fully integrated firm, we connect knowledge and experience across our global network of experts to help clients solve their most complex challenges. From high-performance buildings and infrastructure, to resilient communities and environments, to stable and secure nations, our work is transformative, differentiated and vital. A Fortune 500 firm, AECOM had revenue of approximately $17.4 billion during fiscal year 2016. See how we deliver what others can only imagine at aecom.com and @AECOM.

Contact
Lisa Park
Principal, Planning
T 703.682.[illegible]
E lisa.park@aecom.com

aecom.com