

# Andrew E. Hayes, P.E., LEED® AP O+M

304 Brookstone Way, Central, SC 29630  
864.324.2506 --- ahayes3@clemson.edu  
www.linkedin.com/in/ahayes

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## **PROFESSIONAL SUMMARY**

*Licensed professional civil engineer with over 21 years of progressive engineering, construction, public works, facilities management, contract management, and leadership experience. Established track record of safe, successful, on-time, and on-budget execution on a wide variety of complex facility and infrastructure projects both inside and outside the United States. Highly proficient at bringing diverse groups of stakeholders together to facilitate positive outcomes.*

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## **EDUCATION**

### **Clemson University – PhD Civil Engineering** (Anticipated Graduation – Aug 2020)

- Selected as Student Fellow in Resilient Infrastructure and Environmental Systems Program
- Awarded Glenn Research Fellowship
- Engineering and Science Education Certificate Program (11 credit hours)

### **Clemson University – MS Civil Engineering** (Aug 2015)

- Emphasis on Construction Management

### **University of Colorado at Denver – BS Civil Engineering** (Aug 2004)

- Graduated with Special Honors - minors in physics, economics, mathematics, and sociology

### **North Carolina State University – Energy Management Diploma** (2009)

**Defense Acquisition University** – Completed Contracting, Facilities Management, and Program Management career field training required for certification to serve as a warranted Contracting Officer for the US Government

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## **EXPERIENCE**

### **Lead Infrastructure Engineer**, Defense Threat Reduction Agency, Ft. Belvoir, VA (8/15-8/18)

Served as a structural, infrastructure, and security engineering subject matter expert and Deputy Team Chief supervising an interdisciplinary team of senior assessors and coordinating the execution of mission assurance assessments on DoD critical infrastructure assets worldwide. Assessments included evaluation of mission vulnerabilities from an all-threat/hazard perspective and development of appropriate recommendations to mitigate identified risks. Led diverse teams of stakeholders through all phases of the risk management process. Developed innovative training methods for certification of newly-hired engineer assessors to build and maintain four assessment teams capable of carrying out mission assurance and risk management activities.

### **Civil Engineering Graduate Student (MS)**, Clemson University (8/14-8/15)

Selected by the Navy to participate in a one-year fully funded civil engineering graduate program.

- Completed civil engineering masters program in less than 12 months with 4.0 GPA
- Presented a co-authored, peer-reviewed paper on alternative project delivery methods (particularly Integrated Project Delivery) at the 2016 North American Society for Trenchless

Technology “No-Dig” industry trade show in Dallas, Texas. The report was subsequently published in the conference proceedings.

- Completed significant scholarly research project on construction quality control management

**Director of Public Works**, Public Works Department Singapore (6/12-8/14)

Led a 200-person team comprised of military, DoD civilian (US and Singaporean), and contractor employees in executing a broad range of functions including facilities management, transportation, environmental compliance, air operations, supply and material management, family and bachelor housing, lodging, real estate, and host nation coordination/liaison to facilitate US military operations ashore in Singapore

- Directly responsible for execution of a \$7.3M/year base operations support (BOS) contract
- Executed a \$6M/year construction and facility maintenance program
- Responsible for coordination and execution of \$1.8M/year housing lease for US Forces in Singapore
- Served as facilities/environmental program manager, responsible for direct oversight, planning, and execution of a \$6.8M annual budget
- Led strategic facilities planning efforts in support of US military interests in Navy Region Singapore
- Constructed a 2,500 SF ship maintenance facility in 9 months from concept to completion – 100% on time and on budget – facilitating an aggressive and accelerated ship deployment schedule

**Construction Manager and Assistant Operations Manager**, Naval Mobile Construction Battalion Three, Port Hueneme, CA (7/10-5/12)

Assigned to three different construction management positions within a two-year tour with NMCB 3 that included a combat deployment to Afghanistan and a unit deployment to Europe and Africa

- Detachment OIC: Led a 120-person team in the execution of \$2.5M in expeditionary facility construction work at 11 sites across Afghanistan, supporting a joint special operations task force
- Company Commander: Led a 120-person team in the execution of \$12M of horizontal and vertical construction projects in a combat environment, directly supporting the Marine Expeditionary Force deployed to Camp Leatherneck, Afghanistan
- Assistant Operations Officer: Developed and implemented plans for operational employment of the entire 600-person battalion operating in 18 countries across Europe and Africa, improved the unit’s quality control program, updated all unit standard operating procedures, received tasking from higher headquarters and issued operations orders, tracked unit resources (manning, equipment, tools, and materials) ensuring unit readiness, and coordinated logistical and embarkation details for unit detachments operating at remote sites

**Engineering, Construction, Facilities Services, and Procurement Director**, Public Works Department Atsugi, Japan (5/08-5/10)

Led a 38-person team (including military, DoD civilian, and host nation employees) in the planning, acquisition, and execution of all engineering design, construction, and facility support services at Naval Air Facility Atsugi, Japan. Examples of completed projects include:

- Directly managed over 20 facility service and construction contracts in the execution of a \$20M annual construction budget and \$6M annual facility support services budget
- Constructed a \$5.5M Golf Course Clubhouse and Restaurant facility
- Constructed an \$8M expansion to the Navy Exchange retail store
- Renovated a 1940’s-era aircraft hangar including fire suppression, architectural, electrical, mechanical, and minor structural upgrades valued at \$10M

**Facility Maintenance, Transportation, and Utilities Officer**, Public Works Department Atsugi, Japan (5/07-5/08)

Led a 200-person team made up of military, US civilian, and Japanese civilian employees in the execution of facilities maintenance, utility production and distribution, and transportation services valued at over \$5M annually at Naval Air Facility Atsugi, Japan.

- Led a 50-person emergency response team to provide relief to citizens of Kashiwazaki City and

neighboring towns immediately following the Chūetsu offshore earthquake in Niigata Prefecture in July 2007. The team worked with Japanese military engineers to install air conditioning systems in evacuation centers that housed thousands of evacuees after hundreds of homes in the area were condemned following the earthquake.

**Engineering Officer**, Provincial Reconstruction Team (PRT) Asadabad, Afghanistan (5/06-5/07)

- Led efforts to bring \$6M in infrastructure projects to war-torn Kunar Province in eastern Afghanistan, providing health care facilities, building security and self-governance, providing access to clean water, fostering commerce, facilitating communication and transportation, and extending central government influence through a variety of construction projects. These projects also facilitated greater US and NATO influence in the area by establishing trust and goodwill among the local populace within the province.
- Awarded the largest civil reconstruction project that had been awarded in Afghanistan at that time. Scope included widening and paving a 32-kilometer road from the provincial capital to one of the main district centers in difficult, mountainous terrain; construction of bridges, micro-hydroelectric power plants, drinking water wells and distribution systems.

**Assistant Public Works Officer**, Public Works Department Jacksonville, Florida (5/05-5/06)

Responsible for development and execution of facilities maintenance projects at Naval Air Station Jacksonville and Outlying Landing Field Whitehouse in Jacksonville, Florida valued at \$750K including airfield pavement and lighting repairs, base-wide road paving storm drainage system repairs, and other projects.

**Civil Engineering Undergraduate Student**, University of Colorado at Denver (8/01-8/04)

Selected by the Navy to complete a Civil Engineering undergraduate degree program. All program requirements were completed in just three years while also finishing Navy commissioning program requirements as well as four minors (in mathematics, economics, physics, and sociology) in just three years with a 3.78 GPA.

**Engineering Aid**, Naval Support Facility Thurmont, Maryland (Camp David) (12/00-5/01)

Performed various technical support functions for the Public Works and Assistant Public Works Officer in support of Presidential visits to the facility. Primary day-to-day duties included development of scopes of work, specifications, and cost estimates for projects to improve and maintain the unique camp facilities.

**Engineering Aid**, Naval Mobile Construction Battalion Five, Port Hueneme, California (10/97-12/00)

Served as a draftsman, surveyor, and materials testing technician on numerous horizontal and vertical construction projects during three seven-month deployments to Puerto Rico, Okinawa, and The Bahamas and the “homeport” periods in between those deployments.

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**PUBLICATIONS:**

- Hayes, A. and Piratla, K. R., “Optimizing Stakeholder Risk Allocation for Trenchless Projects Through the Use of Integrated Project Delivery Methods,” No Dig 2016 Conference, Dallas, TX. <https://www.nastt.org/node/11008>

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**QUALIFICATIONS AND ACHIEVEMENTS:**

- Registered Professional Engineer (Colorado Registration #: 45948)
- LEED® AP O+M credential holder
- Top Secret – Sensitive Compartmented Information (TS-SCI) security clearance

- Acquisition Career Field Certifications in Contracting (Level III), Facilities Management (Level II), and Program Management (Level II)
  - Recipient of multiple awards including the Bronze Star, Navy and Marine Corps Commendation Medal (three awards), Navy and Marine Corps Achievement Medal (five awards), Afghanistan Campaign Medal, Coast Guard Unit Commendation, and other personal and unit awards
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**PROFESSIONAL MEMBERSHIPS:**

- American Society of Civil Engineers
  - American Water Works Association
  - North American Society for Trenchless Technologies
  - Society of American Military Engineers
  - Project Management Institute
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**PROFESSIONAL DEVELOPMENT TRAINING:**

**CITI**

- Intro to Linux (8/29/18)

**GRAD360**

- Building Teams (09/18/18)
  - 3MT® Boot Camp (10/3/18)
  - Peer Review Publishing (10/26/18)
  - Digital Research Identity (11/30/18)
  - Evidence-Based Teaching Strategies (11/30/18)
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**COMPETENCIES AND INTERESTS:**

**Professional and Academic**

- Resilient infrastructure systems
- Cybersecurity of industrial control and SCADA systems
- Issues that lie at the nexus of security and sustainability
- Engineering and science education

**Personal**

- Flying – licensed Private Pilot
- Outdoor activities – particularly camping, hiking, and fishing
- Immersive cultural experiences – travel, museums, etc.