



**John W. Mogge Jr.**

## **Education**

PhD, Civil and Environmental Engineering, Georgia Institute of Technology

Research Area: Sustainable Planning, Design, and Construction "Breaking Through the First Cost Barriers of Sustainable Construction"

Bachelor of Architecture, University of Florida

Master of Arts in Architecture, University of Florida

Urban and Regional Planning, "University Open Space Planning"

## **Professional Registrations**

Registered Architect: Florida #7522

Registered Environmental Manager: National Registry of Environmental Professionals REM #05753

## **Distinguishing Qualifications**

- Industry expert in sustainability, environmental impacts, infrastructure and transportation systems, public sector finance/fiscal impacts of development, Zofnass/Harvard Sustainable Infrastructure Advisory Board Member
- Industry contributor in the area of business case based sustainable solutions, decision tools for sustainability, and multiple objective decision making, and a World Environment Center (WEC), Board Member
- Specialized experience in large program delivery management, prototypical and definitional project development, and sustainable outcomes
- Recognized thought leader and technical speaker on sustainability in many private and public forums over the last 6 years, including the 2017 American Society of Civil Engineers (ASCE) International Conference on Sustainable Infrastructure; 2017 Society of American Military Engineers (SAME) Joint Education and Training Conference and Small Business Conference; 2015 USF Patel Center for Global Sustainability; 2010 DOD Sustainability Past, Present, and Future Symposium; the 2009 World Future Energy Summit (Abu Dhabi), the Nyenrode Institute, NL, Business Roundtable on Sustainability, and the IBM Smarter Planet Global Innovation Outlook
- Editor and principal author of the inaugural "Sustainable Planning and Building Design Guide for the USAF"
- More than \$6.2 billion in worldwide planning, design, operation, maintenance, and construction-related experience

## **Professional and Volunteer Focus**

Dr. Mogge is professionally focused on promoting and leading the diversification and growth of global environmental and sustainability knowledge and services through the development of business case based differentiation and technical innovation. A recognized thought leader and technical speaker on sustainability, he has been engaged in sustainable development for the last 19 years and over the years has presented at many private and public forums, with some of the more notable being the Enablon Sustainable Performance Forum; the ASCE International Sustainable Infrastructure Conference, twelve of the AHC Group's Environment and Energy Innovation Workshops for Industry; the USF Patel College of Global Sustainability, the Society of American Military Engineers (SAME) Joint Engineer Training Conference on "Net Zero Planning;" multiple Department of Defense Environmental Occupational Health and Safety Symposiums; the first World Future Energy Summit (Abu Dhabi), the Nyenrode Institute, NL, Business Roundtable on Sustainability, and the IBM Smarter Planet Global Innovation Outlook and many others. Most recently through his work with the World Environment Center, John co-authored an article promoting engineering schools to expand their courseware to include the fundamentals of sustainability. Additionally he authored his firm's winning submission for the 2016 World Environment Center Gold Medal Award. This was the Center's first award to a firm in the professional services industry. He has numerous peer reviewed articles for academia on frameworks to integrate sustainability into engineering curricula and the textbook "Sustainable Buildings and Infrastructure – Paths to the Future" 2<sup>nd</sup> Edition highlights three of his projects as case studies. His current focus is on Green and Sustainable Infrastructure as a key to advancing sustainable international economic growth.

An experienced business leader, program manager, sustainability consultant, registered environmental manager and architect, John brings an experience base of over \$6.2 billion of world-wide, multi-disciplinary experience in environmental, planning, design, operation, maintenance, and construction projects. His industry experience includes the successful delivery of multiple large-scale military weapon system bed down programs for the U.S. Army and the U.S. Air Force (USAF), and large program sustainability planning and start-up operations, including the London 2012 Olympics Sustainability Program Plan, and the MASDAR City (United Arab Emirates) Sustainable Transportation Technical Integration Program Plan.

John served in the U.S. Air Force as a civil engineer officer for 26 years and held a series of diverse design and key managerial positions, including various senior and executive-level positions. John is a Fellow of the Society of American Military Engineers (SAME), and the Society's 2015 -2016 National President. He was also the 2012 Chair of SAME's National Energy and Sustainability Mission Committee. John is a member the American Institute of Architects and the National Registry of Environmental Professionals. He currently serves as the Chairman and President of the SAME's Foundation Board.

## **Representative Business and Corporate Officer Accountabilities**

**Practices Director:** Led the transformation of a loosely held technical function into a technical practice based environmental growth engine for the firm resulting in the ENR ranked number one firm in the industry.

**Innovation Leader and Coach:** Called on to reinvigorate a spirit of environmental services market leading differentiation. Created and taught the firm's first in-service training on Innovation. Developed the firm's environmental Innovation Grant Award Program.

**Strategy and Sales Director:** Called to lead the environmental business unit's growth transformation in 2008 and again in 2015, and drove profitable compounded annual growth rates of 6% and 7%.

**Interim Environment and Nuclear Business Unit President:** Called on by the CEO to bridge an unexpected departure for a 10 month period. Successfully delivered the \$2 billion unit's business plan sales and profitability targets.

## **Representative Programs and Projects**

**Project Executive: Palace of Westminster Refurbishment and Renovations;** recently awarded long term program to sustainably restore, rehabilitate and renovate the palace estate.

**Project Executive: Faro Lead and Zinc Mine,** Yukon Territory Canada; responsible for the successful delivery of the remediation planning and phase one remediation program for acid rock waste water and contamination containment.

**Project Manager, Air Force Center of Environmental Excellence, DoD Strategic Sustainability Performance Plan.** This project was definitional and prototypical in nature, and required the development of original guidance documents and assessment methods for 17 of the 22 sustainability objectives include three on Net Zero Energy, Waste and Water.

**Project Manager, Ireland Development Agency (IDA) Sustainable Development Framework.** This project focused on the development new criterion and decision support tools for the IDA client. These tools were developed to begin the transformation of their site usage and development of approaches into sustainable outcomes for all of the properties and sites under their purview. The project also included training the client staff in the use of the specialized decision support tools. Responsible for developing a business case for this Land Development and Sustainability Decision Support System. Developed the hypothetical cost and return on investment flows stemming from the adoption of the frameworks to assist this government agency in re-engineering their approach to attracting clean- and high-tech foreign direct investors to the country through the use of the firm's sustainability framework for land development. Primary author of the first comprehensive management plan (200-page document) to implement the sustainable solution for the entire development. Trained the client in how to use the Sustainable Assessment Framework, a decision support tool, to help meet the client's independently achieve their sustainable development goals.

**Transportation Program Manager, MASDAR Program Management.** Led development of a business case for the transportation systems technology plan for this zero waste, zero energy sustainable city that will accommodate 65,000 residents and commuting workers, run on 100 percent renewable energy, provide a carless transportation system, and serve as an incubator of clean technologies. Planning architect for the development, pioneering this prototypical technology and intellectual property rights for sustainable land development. Responsibilities included managing the cost and return on investment flows for the technology plan.

**Program Manager, Program Management Services, London 2012 Olympics.** Created the sustainable development strategies, management plan for sustainability, and the Sustainability Program Execution Plan for the UK's hosting of the 2012 Olympic and Paralympics Games. Developed the Sustainable Development Policy and Management Plan for the delivery of venues for the games with a programmed total installed cost of £6 billion.

**Program Executive, Robins AFB, GA.** Developed and led the acquisition of the second housing privatization project in the USAF, valued at \$54 million for 760 units. Briefed and won secretarial and congressional level approval of the project, and secured an additional \$6 million for renovation of 90 additional houses.

**Project Developer, Robins AFB, GA.** Piloted the development and completion of a web-based Geographic Information System (GIS) for an 8,800-acre installation. Provided program oversight for the Air Mobility Command's infrastructure utility mapping and GEOBASE/GIS integration. Creation of 12 area plans detailing \$300 million of long-term facility and infrastructure capital replacement investments.

**Principal in Charge, Gordon River Water Quality Park.** Co-developed this first and nationally award winning natural treatment system park project to treat storm water runoff before entering the Gordon River watershed. Recruited the project delivery team and mentored a new project manager in delivery of these prototypical technologies. For this ENR Civil Infrastructure Award Winning Project, led the planning, design, and construction oversight for this prototypical natural treatment based storm water management project, which featured a living laboratory for students and a wildlife preserve and refuge. Responsible for project technology and quality. This was an innovative approach to storm water management, natural and recreational resource creation, and educational asset creation and provided permitting solution that allowed roadway construction to proceed through this Wild and Scenic River area.

**Program Executive, Memphis Shelby County Aviation Authority, TANG C-141 to C-5 Weapon System Bed Down.** Led, oversaw, and managed the concept design, detailed design, procurement, construction management, and program delivery management oversight of the C-141 to C-5 aircraft conversion and relocation of the Tennessee Air National Guard 164th Airlift Wing.

**Principal in Charge, Clayton County GA, Special Purpose Local Options Sales Tax (SPLOST) Capital Investment Program.** Provided the executive leadership, recruited the program management team, and stood up the \$225 million capital investment delivery program for the county. Provide monthly performance reviews and senior technical oversight for the program's major projects.

**Principal in Charge, Capital Improvements Program for the City of San Antonio (TX).** Provided executive leadership, recruited program management team, and stood up the \$500 million capital investment delivery program for the city. Provided monthly performance reviews and senior technical oversight for the program's major projects.

**Project Executive, Consolidated Support Maintenance Shops (CSMS), Camp Blanding FL.** Oversaw and provided senior technical review of all planning and design documents for this \$12 million green field complex. The CSMS provides centralized maintenance and overhaul facilities for all of the Florida Army Guard military vehicles and equipment in Florida. The complex was comprised of eight facilities on a site of 20 acres.

**Project Manager, Sustainable Development Support for March ARB C-17 Bed down Program.** Led a team in the planning, design, and construction management of multiple facilities to accomplish the C-141 to C-17 transition and bed down. Facilities included squadron operations, maintenance, administrative, logistics, warehousing, and one hanger. Responsible for managing all of the professional services in developing a bed down plan for March ARB that is characterized by the number of significant sustainable design elements. Incorporation of the most feasible features into the facility design is expected to reduce life cycle costs and promote a positive working environment. Responsible for leading a team that completed the designs for over \$20 million of USGBC LEED® certifiable construction and renovations at the "Silver and Platinum" levels. Within the sustainable development scope of work are 8 operations categories, 24 goals, and 35 specific performance targets, which must all be organized and connected to deliver multiple benefits. Included are a Sustainable Development Management Action Plan, which maps out policy statements, action plans, consistency review, LEED® certification support, metrics measurement and indicators, and an integrated metric tool (ecological footprint), which will guide later work. The sum total of this work postures March ARB as the first USAF installation to carry out a New Mission C-17 Bed Down as a Sustainable Development.

**U.S. Air Force Reserve Command (AFRC) Civil Engineer.** Responsible for the infrastructure and facility programs at 13 AFRC bases with a plant replacement value of more than \$4 billion, and 30 tenant wings located on bases and airports throughout the U.S. with an additional plant replacement value of \$3.5 billion. Senior officer and functional manager of 5,700 full-time and reserve civil engineers organized in 40 squadrons, and personally directed a professional staff of 80.

**Facility Program Manager, C-5 Aircraft Depot Relocation Program, Robins AFB, GA.** Planned, programmed, and led the delivery of \$200 million of depot overhaul facility modifications to accept the C-5 Depot Overhaul Mission at Robins AFB, GA. Key project was an innovative four-bay hangar tail enclosure concept to enclose the C-5 aircraft, which saved \$45 million in new construction costs and created the margin that won a \$750 million, 7-year overhaul contract.

**Base Civil Engineer for Robins AFB, GA.** Responsible for the infrastructure and facility programs for the installation, which has a daily population of 24,000 people located on 8,900 acres in 1,570 facilities. In this capacity, directed a line organization of 900 people. Responsible for execution of an average annual maintenance and capital construction program of \$250 million. Also commanded 400 military engineers with a worldwide mobility commitment, deploying three times to the Middle East.

## **Selected Accomplishment Prior to 1996**

**Policy Board Member for 130 Worldwide Installations, Pentagon, Arlington, VA.** Scope: Planning Size: 130 USAF Installations worldwide. Role: Senior Executive. While assigned to the Pentagon as a senior executive policy board member for 130 worldwide installations with a replacement value of \$350 billion, Dr. Mogge helped develop strategic, business, and financial plans to support diversified worldwide operations. During his military career, he led three base-level organizations, responsible for planning, design, construction, operations, and maintenance of installations and facilities. Accomplishments in this role include the following:

- Instituted a corporate facility board structure to review, approve, and allocate annual funding for facility investments, and successfully led a corporate team in the development of two 6-year, \$12 billion per year facility support financial plans.
- Transformed an annual \$250 million programmatic line unit to a results-oriented activity based cost and management unit while creating a climate of change acceptance for the development and implementation of a sustainable facilities program.
- Won financial support for and executed seven previously unsupported capital construction projects valued at \$75 million, and received a corporate-level award as the best of 23 large engineering, construction, and operations production organizations.
- Led the development of a 15-year financially constrained infrastructure support plan for 89 installations.
- Led achievement of performance measures for five facility programs at 13 locations in first 2 fiscal years.
- Initiated the first USAF Environmental Training Symposium, and copyrighted and published two symposium proceedings.
- Assistant Professor, Environmental Management, Civil Engineer School, Air Force Institute of Technology

Chaired the development of the Robins AFB, GA utilities privatization acquisition strategy, and the request for proposal (RFP) template for four systems and two central plants valued at more than \$300 million, with an annual operating budget of \$30 million.

Creation of the concept of the Air Combat Command's Total Environmental Restoration Contract (TERC), and won senior and secretarial level implementation approval. Delivered schedule and cost reductions of more than 34 percent for environmental restoration projects.

Negotiation of eight federal facility compliance agreements in eight states jointly with state and federal environmental regulators, while maintaining program scope and budget control. Won agreement for the use of prototype technology.

Establishment of the first widely accepted use in the Department of Defense of "natural attenuation," leading to broader regulatory support for cleanup standards consistent with planned land uses.

Joint development with federal regulators of acceptable surface contamination standards for common heavy metals based on re-use planning, probable exposure risk, and human pathway analysis. Led to revised consensus standards.

## **Selected Publications/Presentations**

2015 – World Environment Center (WEC) CH2M nomination package for the 2016 WEC Gold Medal Award.

<http://www.wec.org/wec-gold-medal-gala-on-may-19>

2014 – Patel Global Center for Sustainability – Investment Grade Green and Sustainable Infrastructure (January 15) – paper <http://psgs.usf.edu/patel-center/2014-green-infrastructure-conference/>

Hawkins, N., R. Patterson, J. Mogge, and T.F. Yosie. "[Building a Sustainability Road Map for Engineering Education.](#)" American Chemical Society's *ACS Sustainable Chemistry & Engineering*. Publication Date (Web): November 13, 2013.

Keynote speaker at [Enablon Sustainable Performance Forum 2013 and 2015](#).

Panelist at Environmental Industry Summit 2013. San Diego, CA.

Mogge, J. 2013. "[London Olympics: Real Outcomes & Real Money Saved.](#)" Presented at the 25th Bi-Annual Corporate Affiliates ACHIEVING RESULTS Executive Workshop in Phoenix, AZ. January.

2012 – SAME Regional Conference Programs – Net Zero Energy, Waste and Water [http://themilitaryengineer.com/pdfs/exec\\_forum\\_2012\\_report.pdf](http://themilitaryengineer.com/pdfs/exec_forum_2012_report.pdf)

2011 – 2012 – Program Guidance Documents for the DOD's Strategic Sustainability Performance Plan. (CH2M HILL project for DOD) – open source material. [http://ch2mhillblogs.com/water/wp-content/uploads/2011/10/AFCEE\\_Sustainable\\_Communities\\_Final.pdf](http://ch2mhillblogs.com/water/wp-content/uploads/2011/10/AFCEE_Sustainable_Communities_Final.pdf)

Mogge, J. 2009. "Technology of Personal Transit." Presented at World Future Energy Summit in Abu Dhabi, hosted by MASDAR.

Environmental Business Review: quoted in "In Troubled Europe, Pockets of Opportunity—Or Follow Your Multinational Clients Elsewhere." Volume XXV, Number 6/7, 2012.

Mogge, J. 2004. Georgia Institute of Technology dissertation [Breaking Through the First Cost Barriers to Sustainable Planning, Design and Construction](#)

Mogge, J. 1999. Editor and principal author. "The (first) Sustainable Planning and Building Design Guide for the USAF."

## **Memberships and Professional Organizations**

World Environment Center; Board of Directors

American Institute of Architects, Committee of the Environment

Society of American Military Engineers (Fellow) and past President and Board of Directors; current Chairman SAME Foundation

National Mentoring Initiative (past Vice-Chairman), Academy of Fellows