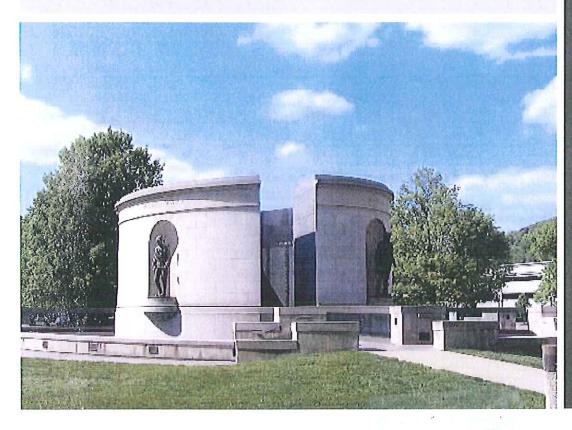
A/E SERVICES DESIGN OF VETERANS MEMORIAL RESTORATION

State of West-Virginia



19 DECEMBER 2011

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VETERANS MEMORIAL RENOVATION Expression of Interest Project No. GSD126417

STATE OF WEST VIRGINIA





September 2, 1011

SUBMITTED TO:

State of West Virginia Purchasing Division 2019 Washington Street, East PO Box 50130 Charleston, WV 25305-0130 Krista Ferrell 304.558.2596

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FORMS

Ms. Krista Ferrell, Buyer Supervisor West Virginia State Purchasing Division 2019 Washington Street, East Charleston, WV 25305-0130

RE: VETERANS' MEMORIAL RENOVATIONS GSD126417

Subject: Quinn Evans Architects' Expression of Interest and Qualifications



2121 WARD PLACE, NW, 4TH FLOOR WASHINGTON, DC 20037 202 298 6700 Dear Ms. Ferrell and Members of the Selection Committee:

We are pleased to present our qualifications as part of this Expression of Interest in the requested work at the Veterans Memorial on the campus of the State Capitol in Charleston, West Virginia. Our original material is submitted in 3-ring binders to facilitate your agency's sharing of the materials for internal review. We understand that the State will select three firms viewed as most qualified to perform the desired service, and then interview the firms regarding anticipated concepts and the approach to treatment described in our EOI. If we reach the stage of confirming a scope of service and successfully negotiating a price for our services, we understand that the State may offer a contract for those services. The order of our submission is as follows:

- Concept Description outlining our firm's approach, design issues, proposed methods, and project sequence.
- Firm/Team Qualifications providing our firm's contact information, team members from Quinn Evans Architects and our proposed consultants, and other requested information.
- Project Organization organizational chart and information describing key
 personnel, and the location of our firm's offices, indicating where the project will be
 managed and the work performed.
- Demonstrated Experience in Completing Projects of a Similar Size and Scope –
 project descriptions of relevant projects demonstrate our experience and capabilities;
 references for the five most recent projects are identified.
- Forms as required, including the EOI form and Vendor Affidavit.

Quinn Evans Architects has undertaken several similar projects on memorials for the National Park Service, as well as projects in Harpers Ferry. We are offering to you a seasoned team that has worked together many times previously. Our team is strategically located in Washington, DC and, if needed, we have additional capacity of our offices in Ann Arbor, Michigan, Detroit, Michigan and Madison, Wisconsin. Larry Barr, AIA, President of QEA, is registered in the State of West Virginia and will have ultimate responsibility for the construction documents resulting from this project. Our technical team will be led by Baird Smith, FAIA, FAPT, QEA Principal and Director of Preservation. He will draw on other senior staff including Ilene Tyler, FAIA, FAPT, and Tom Jester, AIA, LEED AP, both of whom bring extensive experience in historic preservation, conservation, and renovation projects. QEA has the resources and expertise to execute the report, prepare the documents for bidding, and to perform construction phase services to the highest professional standards. We await your positive review.

Cordially,

Quinn Evans Architects

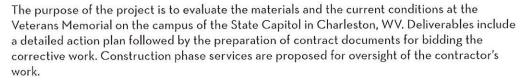
Baird Smith, FAIA, FAPT Principal

Belm It

CONCEPT

Provide a general discussion of the project and the firm's approach to addressing issues and concerns including anticipated concepts, proposed methods of design and project sequence as explained in the Background, General Requirements, and Project Description, above. Include a discussion of similar previous projects and how these issues were resolved.

APPROACH TO THE PROJECT



In our approach we will develop design concepts that address the issues listed below and in the RFQ. We will respect the design integrity of the original Memorial, and that by repairing functional and material deficiencies, we will be able to enhance the original design and respect the shared community memory of those more than 10,000 West Virginians who lost their lives in the major conflicts honored by the Memorial.

EXISTING CONDITIONS AND ASSESSEMENT PLAN

The anticipated work items require on site inspection to confirm existing conditions and the extent of repair work necessary to restore the integrity and performance of the materials and the original design concept. We utilize a holistic approach, taking into consideration the obvious and not so obvious factors which could be impacting the memorial. This is accomplished by a multidisciplinary team of specialists as you will see below. Our understanding of the required work and approach to carrying out that work follows:

- 1. <u>Limestone Deterioration</u>: The limestone perimeter of the water pool and the bridges across the water to the central structure will be carefully inspected. The type of soiling and damage will be evaluated and a program designed to restore their appearance. Limestone usually responds well to simple cleaning methods using clean water, rather than chemicals, but we will recommend tests to evaluate the effectiveness of these safe methods that do not harm the limestone or the environment. In some cases, biological soiling does not respond well to water alone, and a mild chemical cleaner might be tested for greater effectiveness in removing the unsightly stains. In no cases will harsh acids or abrasive methods be recommended, as limestone is easily damaged by these treatments and they should never be used on limestone.
- 2. Aluminum & Glass Handrails: The handrail assemblies be evaluated for the condition of the materials and for compliance with building codes and accessibility guidelines. Standards have changed since the original installation, and the current installation may be partially inadequate. Results of the condition assessment and code analysis will be summarized in the report.
- 3. <u>Electrical System</u>: The existing electrical system and lighting fixtures will be evaluated for code compliance, safety, and adequacy for their intended purpose. Our electrical engineer will evaluate the current wiring system and the remaining life of the fixtures. We will need direct cooperation from the DGS to gain access to electrical panels to enable evaluation of circuits and wiring assemblies. The lighting devices and effectiveness will also be evaluated, including consideration of strategies to reduce energy usage. If aesthetic changes are desired by the Owner, our team will propose alternate fixtures and/or lamping to satisfy stated goals.





Where water is infiltrating the below-grade fixtures, the source will be investigated and an approach to either repair or replace these fixtures will be proposed. Current lighting levels for the walkways will be measured and a concept that meets target levels proposed, including replacement of the walkway lighting and bollards on which they are mounted; a new energy-conserving control system will be proposed for the lighting.

- 4. <u>Circulating Water System</u>: The pool's water system will be investigated by our civil engineer in order to make recommendations for upgrading the system, providing water treatment and addressing code-compliant drainage piping. Once approved, these changes will be documented for bidding. The pool and the waterproofing liner will be inspected for leaks and damage, so that repairs can be documented.
- 5. <u>Ventilation and Access to Interior Spaces</u>: The air system needs will be investigated by our mechanical engineer, with a recommendation for changes to mitigate any harm caused by the poor operation of the ventilation system. We will propose additional access hatches to assure proper maintenance of the system.
- 6. Roofing and Flashing: The roofing assemblies for the structure will be inspected, and an assessment made of the remaining useful life of the membrane and accessories. Recommendations in the report will address the need for a new roof system; repairs and/or replacement will then be documented for bidding and implementation.
- 7. Original Construction Details and Recent Repairs: The 2007 repairs will be reviewed. We will also contact the sculptor, Joseph Mullins, regarding the original construction. Any information about details, methods and materials used will be most useful to the investigation.
- 8. <u>Maintenance Practices:</u> This will require interviews with the DGS service staff to record materials, chemicals and equipment used for routine and special maintenance.
- 9. Other Conditions: As we undertake the survey, conditions unknown at this time will be investigated and a strategy for their repair included in the report. These items may include, but are not limited to, repair of the concrete walkways, installation of signage, repair of the incised panels, and addition of any features desired by the State to complete the upgrade and restoration of the Memorial site. This is a flexible item and will be adjusted to satisfy the Owner and as needed to fully address ongoing and new concerns.

ACTION PLAN - REPORT OF FINDINGS AND RECOMMENDATIONS

An evaluation report will summarize the investigative tasks outlined above. The anticipated format and general topics to be included, as listed in the RFQ, are as follows:

- Existing Conditions observations and results of the in-depth investigation will be summarized
 as a baseline of information for addressing those conditions.
- 2. Life Safety and Code Issues in addition to the material conditions assessment, conditions related to life safety (or other building code issues) will also be investigated. These will include surface conditions, accessibility, lighting levels, and other items noted during the site investigation phase.
- 3. Electrical Systems conditions specific to the electrical systems will be investigated to ensure that the remaining life of each component is adequate, and that no risk to the public exists by allowing some components to remain in service while selectively replacing others.
- 4. Restoration Phasing recommendations to address deficiencies, life safety, and failed systems will be carefully considered to determine if a phased process is appropriate.

5. Estimate of Construction and Restoration Costs - The approach to treatments will present options with preliminary pricing to enable the Owner to make decisions.

These findings will be provided in a report and we will be more than happy to provide an illustrated briefing of these findings and recommendations to stakeholders to assure that everyone can share in the process.

CONTRACT DOCUMENTS

Drawings and technical specifications for bidding the work will be prepared based on the work and options approved from the information in the Report. We have a very large portfolio of completed restoration projects to draw upon to assure that high quality and durable repairs and maintenance work will result. If appropriate, additional work may be documented as add alternates to give the Owner flexibility in accomplishing additional work.

CONSTRUCTION PHASE SERVICES

Quinn Evans Architects will provide conventional construction phase services, including scheduled site visits and inspections. If needed during the bidding phase, this could include work to review contractor work packages and pricing proposals.

Observation of work in progress entails regular meetings on site with the Contractor's team and the Owners' representatives. Quinn Evans Architects and OUR engineering consultants will participate when needed.



FIRM OVERVIEW











The experienced professionals at Quinn Evans Architects are committed to elegance in design and well-crafted solutions that sustain and renew the tradition of our built environment.

QEA is a full service architectural firm with offices in Washington, D.C., Ann Arbor, Michigan and Madison, Wisconsin. In order to meet our clients' needs, our comprehensive services include renovation and restoration of existing structures and sites as well as the design of expansions and new structures. In addition to full architectural services, we offer a diverse portfolio that combines context-sensitive and innovative designs with sustainable strategies.

Sensitive planning and design solutions involve both the preservation and reuse of important buildings, as well as the development of new structures that complement and respect their surrounding environment.

More than 75 projects in the firm's portfolio have been honored with over 100 awards for quality design, outstanding restoration work, and innovative approaches to adapting existing facilities for new uses.

With over two decades of experience, QEA's professionals combine expertise in renovation architecture with knowledge of the special issues involved in developing context-sensitive new construction. This enables us to renew important cultural landmarks, while maximizing the structure's economic viability and fostering community pride in the built environment.

Founded in 1984

Total Staff in Firm: 60 32 LEED Accredited Professionals

Larry R. Barr, AIA, President Steven C. Jones, AIA, Executive Vice Pres. Jeffrey C. Luker, AIA, Vice President Elisabeth Knibbe, FAIA, Vice President

Michael L. Quinn, FAIA, Founder, Principal Carl Elefante, FAIA, Principal Baird M. Smith, FAIA, FAPT, Principal Alyson Steele, AIA, Principal Kenneth A. Clein, AIA, Principal Ilene R. Tyler, FAIA, FAPT, Principal

PROJECT CONTACT INFORMATION:

2121 Ward Place, NW, 4th Floor Washington, DC 200237 v 202.298.6700

Larry Barr, AIA, President lbarr@quinnevans.com

ARCHITECTURAL CONSERVATION

Quinn Evans Architects is a full-service architecture firm that offers special expertise in all areas of architectural conservation—from materials testing and treatment evaluations to historic construction methods and state-ofthe-art materials conservation techniques.

Director of Preservation Baird Smith, FAIA, FAPT, has over 35 years of preservation experience, including six years with the Technical Preservation Services Division of the National Park Service. He is active in the Association of Preservation Technology and has written several articles published by the National Park Service including "Moisture Problems in Historic Masonry Walls" and "Preservation Briefs 3: Conserving Energy in Historic Buildings."

The firm offers hundreds of years of combined preservation experience, covering a wide range of materials conservation and repair techniques. A selected list of conservation challenges includes:

STONE Determination of safe and effective procedures for removal of staining and built-up deposits. Visual and chemical analysis of weathering and erosion, and structural evaluation of internal stresses and crack patterns. Nondestructive testing of internal and external condition of historic stonework. Repointing, repair and replacement guidelines for restoration, stabilization and replication.

METALS Analysis of metal alloys and original fabrication processes. Isolation and correction of corrosion mechanisms, including chemical attack, oxidation and the interaction of dissimilar metals. Preparation of repair and replication specifications for damaged or missing components.

wood Evaluation of rotted or insect-damaged structural members and intricately carved woodwork. Identification and matching of wood species. Replication of missing components. Design for consolidation and epoxy reinforcement.

CLAY MASONRY Conditions assessment of brick and terra cotta facades, including surface deterioration, staining, crazing, glaze failure, internal stresses and cracking. Guidelines for mortar analysis, repointing techniques, rebuilding to correct structural defects, and replication of clay masonry units.

CONCRETE Diagnosis and correction of surface deterioration, spalling, staining, and internal stresses and cracking. Guidelines to replicate historic concrete mixes, repair techniques to correct structural defects, consolidation treatments, and weather protection.

FINISHES Stabilization, repair and replacement of plaster walls, moldings, cornices, brackets and medallions, and evaluation of alternate replacement materials. Determination of environmentally-safe lead paint removal and disposal procedures. Analysis of original paint colors, decorative patterns, wallpapers, and carpets.









WASHINGTON, DC ANN ARBOR, MI DETROIT, MI MADISON, WI

QUINN EVANS

BAIRD SMITH, FAIA, FAPT

PROJECT DIRECTOR

Mr. Smith has served as Director of Preservation for the DC office of Quinn Evans Architects for over 10 years. For the past 35 years, he has specialized in preservation and rehabilitation projects with an emphasis on technology, materials science and appropriate treatments. He is nationally recognized as an expert in brick and stone masonry deterioration causes and repair procedures. Since Mr. Smith has focused his career on projects involving historically significant structures, he has detailed knowledge of a wide range of materials conservation issues and solutions.



SELECTED RELEVANT EXPERIENCE

AFRICAN AMERICAN CIVIL WAR MEMORIAL, NATIONAL PARK SERVICE, WASHINGTON, DC

Project Director for the preservation and repair of this granite and stone memorial wall with bronze statuary which has degraded over time due to exposure to the weather and public traffic.

PENNSYLVANIA MONUMENT, PETERSBURG NATIONAL
BATTLEFIED, NATIONAL PARK SERVICE, PETERSBURG, VIRGINIA
Project Director for the rehabilitation design for the
largest monument within the Petersburg National
Battlefield. The project included stone repointing and
cleaning, as well as conservation of the bronze statue by
noted sculptor Frederick Wellington Ruckstuhl.

MULTIPLE PROJECTS, HARPERS FERRY NATIONAL HISTORICAL PARK, WEST VIRGINIA

Principal-in-Charge for the rehabilitation three historic office facilities used by the National Park Service Training Center.

NATIONAL ACADEMY OF SCIENCES, WASHINGTON, DC
Project Director for the comprehensive rehabilitation and
restoration of the headquarters facility for this national
organization. Mr. Smith led the methodology and design
process for the preservation and conservation of historic
fabric and materials.

NATIONAL PARK SERVICE IDIQ, PRESIDENT'S PARK, WASHINGTON, DC

Project manager for task order contract, which included a \$2.1 million systems renovation at the Washington Monument.

FORT HUNT BATTERIES, ALEXANDRIA, VIRGINIA
Project manager for treatment plan and construction
documents for the stabilization and preservation
of Endicott Period (1891-1905) military fortification
overlooking the Potomac River.

PRINCIPAL

DIRECTOR OF PRESERVATION

Joined QEA in 1991

REGISTRATION

DC, 1977; Virginia, 1998

PROFESSIONAL AFFILIATIONS

American Institute of Architects National Trust for Historic Preservation Association for Preservation Technology Preservation Alliance of Virginia

HONORS

College of Fellows, American Institute of Architects, 2008

Honor Award, American Institute of Architects Northern Virginia Chapter, 2011

College of Fellows, Association for Preservation Technology, 2001

Peer Reviewer, GSA Design Excellence Program, 2006-present

SELECTED PRESENTATIONS

American Association of Museums Association for Preservation Technology Maryland Historical Trust National Park Service National Trust for Historic Preservation

SELECTED PUBLICATIONS

Moisture Problems in Historic Masonry Walls

"Conserving Energy in Historic Buildings" Conservation of Historic Stone Buildings: "Diagnosis of Nonstructural Problems in Historic Masonry Buildings"

EDUCATION

University of York, England, Diploma in Conservation Studies, 1980 George Washington University, M.A. in American Studies, 1979 University of Utah, Bachelor of Architecture, 1971



QUINN EVANS

ILENE TYLER, FAIA, FAPT, LEED AP

LEAD INVESTIGATOR / SENIOR HISTORIC ARCHITECT

Ilene Tyler, FAIA, is a Principal and Director of Preservation with Quinn Evans Architects' Ann Arbor office with special expertise in architectural conservation. Ms. Tyler fully understands existing building components and construction systems and has extensive experience in construction documentation for treatments and alterations to existing buildings. She has directed both large and small rehabilitation/preservation projects and possesses a comprehensive understanding of rehabilitation costs to ensure contextually appropriate and cost-effective design solutions.



PRINCIPAL With QEA since 1986

REGISTRATION

Pennsylvania, 1977 Michigan, Ohio, Missouri, Tennessee, Wisconsin, Massachusetts, NCARB

PROFESSIONAL AFFILIATIONS

American Institute of Architects
National Trust for Historic Preservation
Association for Preservation Technology
International
Michigan Historic Preservation Network
The American Institute for Conservation
of Historic & Artistic Works

HONORS

College of Fellows, American Institute of Architects, 2001 College of Fellows, Association for Preservation Technology International, 2002 Oliver Torrey Fuller Writing Award, 2005

PRESENTATIONS AND LECTURES

Association for Preservation Technology League of Historic American Theaters Michigan Society of Planners Michigan Historic Preservation Network National Trust for Historic Preservation Traditional Building

TEACHING EXPERIENCE

Eastern Michigan University, Historic Preservation Program Adjunct Lecturer 1998 to present University of Michigan, College of Architecture Adjunct Lecturer 1989-1994

CO-AUTHOR

Historic Preservation: An Intro. to its History, Principles, and Practice

MUNICIPAL APPOINTMENTS

City of Ann Arbor Planning Commission, 1987–1990 City of Ann Arbor Historic District Commission, 1992–1998

EDUCATION

University of Michigan Bachelor of Architecture, 1970



SELECTED RELEVANT EXPERIENCE

VA NATIONAL CEMETERY ADMINISTRATION INSPECTION
Principal-in-Charge for monument inspections within the
contiguous 48 States to evaluate and assess professional
conservation and repair of historic structures and objects,
including historic monuments and memorials, private
headstones/markers, ornamental artifacts (cannon, tablets,
plaques and seals), and related resources.

MIDLAND VETERANS MEMORIAL, MIDLAND, MICHIGAN
Principal-in-Charge for reconstruction of a memorial that
incorporates extant components with additional material to
commemorate war dead from the Midland area.

CULPEPER NATIONAL CEMETERY, CULPEPER, VIRGINIA Principal-in-Charge of the assessment of conditions, documentation of repairs, and reconstruction of the collapsed brick wall to match the original design as built in the 1870s.

CYPRESS NATIONAL CEMETERY, BROOKLYN, NEW YORK
Principal-in-Charge for the restoration of the historic cast
iron fence which is approximately 525 feet long with doubleswinging gates and ornamental gate posts. QEA completed
documents to restore the cast iron fence sections, replicate
the ornamental gate posts, repair the swinging gates, and
reconstruct the flanking stone piers.

LINCOLN BOYHOOD NATIONAL MEMORIAL, LINCOLN CITY, INDIANA Principal-in-Charge for preparation of a Historic Structure Report for the National Park Service on architectural and landscape site improvements to enhance public access and improve its use as a visitors center. Design alternatives addressed programming, code issues and system upgrades. Project included survey and recommendations for masonry restoration of the colonnade and landscape walls.

THE PARTHENON, NASHVILLE, TENNESSEE

Principal-in-Charge of exterior restoration of this full-scale replica of the original Parthenon. As part of QEA's decade-long involvement, Ms. Tyler led a team of specialty consultants who completed a detailed mapping of existing conditions of the building's decorative frieze and designed a method of documenting the recommended work for restoration.

THOMAS JESTER, AIA, LEED AP

SENIOR PROJECT ARCHITECT

With over 20 years of experience in the field of historic preservation, Mr. Jester has worked on projects for both public and private clients. His project experience ranges from designing rehabilitation projects and additions, to surveying existing conditions, to preparing historic preservation studies and master plans. He is skilled at managing clients and developing consensus for complex projects that involve historic buildings.



SELECTED RELEVANT EXPERIENCE

PENNSYLVANIA MONUMENT, PETERSBURG NATIONAL BATTLEFIELD, PETERSBURG, VIRGINIA

Project Manager for the design and the rehabilitation of the largest monument within the Petersburg National Battlefield for the National Park Service. The project includes stone repointing and cleaning, as well conservation of the bronze statue by noted sculptor Frederick Wellington Ruckstuhl.

NATIONAL ACADEMY OF SCIENCES, WASHINGTON, DC Project manager for the comprehensive rehabilitation and restoration of the headquarters facility for this national organization. Mr. Jester is coordinating the use of sustainable design technologies with preservation treatments to modernize the space.

EASTERN MARKET, WASHINGTON, DC

Senior project architect for the roof structure replacement and roof restoration phase of the comprehensive rehabilitation of the 1873 landmark market.

AMERICAN INSTITUTE OF ARCHITECTS HEADQUARTERS, EXISTING CONDITIONS AND FACILITIES ASSESSMENT REPORT, WASHINGTON, DC

Project manager for the comprehensive master plan for the greening and renewal of the AIA Building, a modern-era office building designed by The Architects Collaborative in 1973. The master plan included preparation of an historic structures report, a space utilization evaluation and workplace optimization study, and development of recommendations for "greening" the building.

ST. ELIZABETHS WEST CAMPUS, WASHINGTON DC
Project architect for a rehabilitation feasibility study that
included preservation planning and condition assessment
for the Center Building, the first building on the St.
Elizabeths campus.



ASSOCIATE
Joined QEA in 2006

REGISTRATION

Maryland, 2006

PROFESSIONAL AFFILIATIONS

American Institute of Architects Association for Preservation Technology DC Preservation League DOCOMOMO International Preservation Maryland

CERTIFICATIONS

LEED Accredited Professional

SELECTED ACTIVITIES

Peer Reviewer, GSA Design Excellence Program, 2008-present Commissioner, Montgomery County Historic Preservation Commission, 2005-present Co-Chair, Association for Preservation

Co-Chair, Association for Preservatior Technology International, Special Technical Committee on Modern Heritage, 2007-present

PUBLICATIONS

Twentieth-Century Building Materials: History and Conservation (McGraw-Hill) Preservation Brief 32: Making Historic Properties Accessible (NPS)

"Conserving the Built Heritage of the Modern Era"

"International Perspectives on Twentieth-Century Heritage"

"Planning and Implementing Modifications for Accessibility in Historic Buildings"

EDUCATION

University of Maryland, Master of Architecture, 1999 University of Pennsylvania, Master of Science in Historic Preservation, 1991 Colby College, Bachelor of Arts, 1988

Education Master of Business Administration University of St. Thomas

Bachelor of Science Mechanical Engineering University of Maryland (1986)

St. Paul, MN (1996)

Registration/Certification Registered Professional Engineer - Maryland (1992) and Virginia (2006)

US Green Building Certification Institute - LEED® Accredited Professional (2001)

Professional Societies and Activities

American Society of Heating Refrigeration and Air Conditioning Engineers (ASHRAE) – Member

Scott A. Spangenberg, PE, LEED^{AP} Principal and Mechanical Engineer

Experience and Key Projects

Mr. Spangenberg is a registered professional engineer with over 20 years of diverse project experience including federal and state government, higher education, healthcare, research, office, central utility facilities. He has extensive project management and design experience in comprehensive HVAC system design, performance and direction of mechanical design, feasibility studies, construction specification and document production, and on-site inspections. As Project Director, he is responsible for overall project management, design oversight, quality assurance and client interaction within the MEP Studio of the Rockville AEI office.

Selected project experience includes:

George Washington University – Textile Museum, Washington, DC: Principal-In-Charge for the construction of a new museum and conservation and resource center.

George Washington University - Ross Hall MEP Infrastructure Study, Washington, DC: Project Manager for implementing a MEP Infrastructure Study for Ross Hall, which included the following efforts: MEP Infrastructure Engineering Assessment of Systems; Proposed MEP Infrastructure Solutions; and Central Energy Plant Life Cycle Cost Analysis.

George Washington University – New School of Public Health, Washington, DC: Project Manager for this new School of Public Health. Primary building program elements for the 163,000 sf building that includes classrooms/lecture halls, conferencing and departmental office space. A potential atrium is planned with common areas.

University of Pittsburgh – Chevron Science Hall, Pittsburgh, Pennsylvania: Principal-In-Charge and Project Manager for the engineering infrastructure master plan services for the Chevron Science Hall, a 275,000 sf chemistry science complex. A few of the specific solutions offered as part of the project included new emergency power generation, replacement of primary electrical service and bus risers, replacement of plumbing systems and risers, and augmentation of HVAC supply systems and exhaust risers.

University of Virginia, McIntire School of Commerce, Charlottesville, Virginia: Project Manager and Mechanical Engineer for this 150,000 sf renovation and addition to Ross Hall the school of business. This world-class facility provides both undergraduate and graduate students with ideal learning and meeting spaces, including state-of-the-art classrooms and technology centers.



Scott A. Spangenberg, PE, LEED^{AP} Principal and Mechanical Engineer

College of William and Mary – The Sherman and Gloria H. Cohen Career Center, Williamsburg, Virginia: Principal-In-Charge for a feasibility study, and the subsequent design of a new 13,000 sf Career Services Center. The Career Center will include a large reception area, presentation rooms, resource area, recruitment suite, offices and support spaces.

University of North Carolina – Morehead Planetarium Renovation – Chapel Hill, North Carolina: Principal-In-Charge for the renovation and new construction addition. This project involved extensive building investigations and careful system planning and coordination with the architect to maintain historic aesthetics. Low slab-to-slab heights are another challenge faced with the new MEP distributions.

University of North Carolina at Chapel Hill - Star Theatre Renovation - Chapel Hill, North Carolina - Project Manager and Lead Mechanical Engineer for this building which consists of the historic 1949 wing and a large addition, built to the east, in 1974. The Star Theatre is housed in part of the original building. AEI was hired to renovate the interior of the Star Theater and the infrastructure, including mechanical, electrical, and life safety that are in need of replacing.

U.S. Army Soldier Biological and Chemical Command - Aberdeen U.S. Army Corps of Engineers – Lackland Air Force Base (AFB) – Dunn Dental Clinic, San Antonio, Texas: Principal-In-Charge for the renovating of an existing dental clinic by designing new lighting, power, information technology and fire alarm system layouts. A mass notification system was also designed to comply with latest military standard.

Prior to joining AEI:

George Washington University – Underwriters Insurance Building, Washington, District of Columbia: MEP services for an adaptive re-use study for a 60,000 sf building. The project also included a due diligence report incorporating existing conditions and a feasibility study for three alternative 100,000 sf building re-use options.

Notre Dame University – Main Administration Building, Notre Dame, Indiana: Lead Mechanical Engineer for a Complete restoration and renovation of the architectural centerpiece of Notre Dame's campus, also known as the "Gold Dome". The project included the addition of mechanical systems to a building that never had air conditioning and ventilation. Attic spaces and floor space were absorbed to fit all new HVAC systems in the building. Single-pane windows were replaced with replica double-pane windows. Special humidification systems pre-treat the air serving special galleries, where painted art work is located.

Ronald Reagan Building and International Trade Center, Washington,



Scott A. Spangenberg, PE, LEED^{AP} Principal and Mechanical Engineer

District of Columbia: Project Engineer for this 3.1 million sf, \$696 million facility that is home to more than 5,000 federal employees and is the largest government building in Washington, DC. The International Trade Center houses a premier conference and event center, executive office space, and an array of dining facilities. A 1 million sf, parking garage serves visitors and tenants. Two major (700 seat and 350 seat) theatrical halls are also housed in the building. A 6,500 ton capacity chiller plant serves built-up custom air handling units located in below grade mechanical rooms and penthouse. Mechanical rooms throughout the building occupy approximately 300,000 sf of space.

NET 2000 Headquarters, Herndon, Virginia: Lead Mechanical Engineer for a 126,000 sf of high-tech, interior office space, including offices, computer/network rooms, and a switching facility. Back-up electrical and mechanical systems were provided to support the headquarters use.

State Farm Data Center, Alpharetta, Georgia: Lead Mechanical Engineer for a 100,000 sf 24/7 mission critical data center. The project includes completely redundant HVAC systems including two completely separate 1,000-ton central utility plants and ten 1,000 KVA generator sets. The cooling towers and thermal storage system were designed to withstand 200 mph winds.

Loudoun County Detention Facility, Leesburg, Virginia: Lead Mechanical Engineer for an 110,000 sf, \$18 million facility containing cell pods replicated in a "clover leaf" formation with a service building at the core. Hydronic heat recovery systems are utilized for the holding cell pods. Close coordination was required for cell chases incorporating plumbing and HVAC systems to minimize space and maximize maintenance access.

Children's Science Museum, St. Paul, Minnesota: Lead Mechanical Engineer for a \$43 million, 250,000 sf arts facility located in downtown St. Paul. Humidification, filtration and architecturally integrated MEP systems were primary design concerns. An approximately 1,200 ton cooling plant was designed to support approximately 15 different air systems.

Hillwood Museum, Washington, District of Columbia: Lead Mechanical Engineer for Historical renovation of a 24,000 sf museum structure. Upgrades involved modernization of the engineered systems while maintaining the architectural integrity of the original Post Mansion.

National Archives II, College Park, Maryland: Lead Mechanical Engineer for a new, \$200 million, 1, 700, 00 sf facility for the world's largest archival facility. The facility includes central plant utilities, archival stack areas, processing areas, laboratories, administrative sections, a parking garage and central plant utilities. Critical temperature and humidity levels are maintained with low tolerances. Dedicated clean steam



Scott A. Spangenberg, PE, LEED^{AP} Principal and Mechanical Engineer

humidification systems were implemented.

Ronald Reagan Building and International Trade Center Chiller Plant, Washington, District of Columbia: Project Engineer for this 6,500 ton chiller plan designed to support a 3,100,000 sf federal building. Primary and secondary pumping system with decoupler is the chilled water hydronic concept. Approximately six units of 1,000 nominal tonnage were installed.

National Archives II – Central Plant, College Park, Maryland: Lead Mechanical Engineer for a 6,200 ton chiller/boiler plant serving 1,700,000 sf of archival lab and administrative space. The chiller plant incorporates primary/secondary hydronics; with a single heat recovery chiller to serve reheat loads. High pressure fire tube boilers serve 100 psi steam throughout the facility to serve heating and clean steam humidification systems.

Ronald Reagan Building and International Trade Center – Central Plant, Washington, District of Columbia: Mechanical Engineer for a 400 ton chilled water plant to support a 3,100,000 sf, \$696 million facility that is home to more than 5,000 federal employees and is the largest government building in Washington, DC. Primary and secondary hydrolic piping was incorporated. High pressurized steam at 175 psi was provided by the district utility company.



Education Bachelor of Science Electrical Engineering University of Manitoba – Winnipeg, Manitoba, Canada (1989)

Registration/Certification Registered Professional Engineer- Maryland (2004) and Ontario, Canada (1992)

Michael Soong, PE Senior Electrical Engineer

Experience and Key Projects

With over 20 years of experience, Mr. Soong is a highly skilled registered professional engineer. His experience includes the analysis and design of power and distribution, lighting, communications, instrumentation, and control systems. His specific expertise includes the layout and design of low-, medium-, and high-voltage systems up to 25KV distribution and up to 230KV transmission including underground and overhead systems, layout, circuiting, calculation and selection of exterior, interior, security, parking lot, and replacement lighting; design and specification of electronic instrumentation and relay coordination; layout and design of electrical switchboards including associated distribution systems.

Mr. Soong is experienced with Life Safety and Fire Code Corrections work including fire alarm systems, fire detection and suppression, and fire pump feeder circuiting. He is also proficient in the design of emergency and standby power systems, nurse call, communications, security, clock, and computer LAN systems.

Selected project experience Includes:

World War II Memorial – Slurry Wall Repair, Washington, DC: Project Manager and Lead Electrical Engineer for the repairs to the failes Slurry Wall pool membrane and drainage system that is part of the World War II Memorial.

National Park Services – Peirce Mill Renovation, Washington, DC: Lead Electrical Engineer for the design of lightning, power and fire alarm building system for a historical landmark building.

National Institutes of Health – Building 10 – Interim Renovation (Electrical Vault), Bethesda, Maryland: Project Manager and Lead Electrical Engineer for the design of new medium voltage transformer vaults and supporting wing electrical closets in Building 10. This project involved extensive site investigations to determine feasibility of chilled water routings, bus-duct routings and conduit runs with existing systems.

College of William and Mary – Integrated Sciences Center, Williamsburg, Virginia: Lead Electrical Engineer for this 140,000 sf Integrated Science Center composed of chemistry, biology and psychology departments. This 95,000 sf new building houses the chemistry and biology departments, which include teaching, research, classrooms, NMR and 8,000 sf vivarium in the basement. A 45,000 sf renovation of Rogers Hall connects the wing and biology and psychology departments.

College of William and Mary – The Sherman and Gloria H. Cohen Career Center, Williamsburg, Virginia: Electrical Engineer for a



Michael Soong, PE Senior Electrical Engineer

feasibility study, and the subsequent design of a new 13,000 sf Career Services Center. The Career Center will include a large reception area, presentation rooms, resource area, recruitment suite, offices and support spaces.

U.S. Army Corps of Engineers – Lackland Air Force Base (AFB) – Dunn Dental Clinic, San Antonio, Texas: Lead Electrical Engineer for the renovating of an existing dental clinic by designing new lighting, power, information technology and fire alarm system layouts. A mass notification system was also designed to comply with latest military standard.

U.S. Army Corps of Engineers – Scott Air Force Base – Illinois Clinical Replacement, Shiloh, Illinois: Lead Electrical Engineer in leading the effort of field investigation to assess the condition and capacity of existing electrical installation. Designed new lighting, power, information technology and fire alarm system layouts for the proposed renovated area, including a new mass notification system to comply with latest military standard.

US Department of Homeland Security - National Biodefense Analysis and Countermeasures Center – NBACC – Frederick, Maryland: Electrical Engineer for this new 160,000 sf secure biocontainment facility comprised of BSL-2, BSL-3, and BSL-4 laboratories, with the capability to conduct testing and threat characterization of high hazard threat agents. The facility includes a significant bio-forensics and analysis program.

National Institutes of Health – Building 10 Electrical Vaults 4A & 7 Study, Bethesda, Maryland: Project Manager and Lead Electrical Engineer for the formulation of a strategy to replace the antiquate equipment without affecting the normal daily operation of the researchers in Building 10. AEI analyzed existing normal and emergency loads in preparation of planning for a complete replacement of existing electrical distribution systems in Building 10 to meet the requirement of a modern laboratory research facility. Many electrical distribution equipment and risers in Building 10 are from initial installation of 1950 and are at end of their service life.

Auburn Hill Public Safety Building – Fire and Police Department, Auburn Hills, Michigan: Lead electrical Engineer contributed to the design of electrical lighting, power, fire alarm and telecommunications for this new public safety building. An indoor firing range is located within the facility.



Education Associates of Applied Science ITT Technical Institute (1997)

Registration/Certification Certified Plumbing Designer C.P.D. (2004)

Professional Societies and Activities

American Society of Plumbing Engineers (ASPE)

National Fire Protection Association (NFPA)

American Biological Safety Association (ABSA)

Chance Cole, CPD Plumbing & Fire Protection Engineer

Experience and Key Projects

Mr. Cole has experience in designing plumbing and fire protection systems that include the renovation and new construction of laboratories, higher education, health science and institutional facilities, which include laboratories, schools and hospitals. He is skilled in designing/calculating various plumbing systems including domestic water, sanitary waste and vent, storm, fuel-oil and fuel-gas, medical gas, pure water and fire protection and other specialty systems as required. In addition to being the department manager for the plumbing department, Mr. Cole also has served as MEP project manager for various-sized projects where his roles have included assisting clients with problems in existing systems and providing effective solutions.

Project Experience Includes:

Alfred I. DuPont Hospital for Children – Boiler Replacement, Wilmington, Delaware: Plumbing Engineer for this project to replace an existing boiler in the central plant with a new dual fuel boiler of equal or larger size. At the option of the owner the replacement could include the installation of a second boiler, a new larger deaeration system, and a new continuous blowdown system to meet the demands of future hospital expansion projects.

College of William and Mary – The Sherman and Gloria H. Cohen Career Center, Williamsburg, Virginia: Plumbing Engineer for a feasibility study, and the subsequent design of a new 13,000 sf Career Services Center. The Career Center will include a large reception area, presentation rooms, resource area, recruitment suite, offices and support spaces.

George Washington University - Ross Hall MEP Infrastructure Study, Washington, DC: Plumbing Engineer for implementing a MEP Infrastructure Study for Ross Hall, which included the following efforts: MEP Infrastructure Engineering Assessment of Systems; Proposed MEP Infrastructure Solutions; and Central Energy Plant Life Cycle Cost Analysis.

George Washington University – New School of Public Health, Washington, DC: Plumbing Engineer for this new School of Public Health. Primary building program elements for a 163,000 sf building that includes classrooms/lecture halls, conferencing and departmental office space. A potential atrium is planned with common areas.

University of Maryland Medical Center – Infrastructure Replacement and Master Plan – North Hospital – Baltimore, Maryland: Plumbing Engineer performed field survey, interviews with users and facility personnel, prepared the feasibility study report on the infrastructure



Chance Cole, CPD Plumbing & Fire Protection Engineer

conditions and necessary master plan upgrades and options.

University of Pittsburgh – Mid-Campus Complex Renovations – Pittsburgh, Pennsylvania: Plumbing Engineer for a NIST grant for Nanoscience Research space renovation, which included 13 experimental laboratories that are pursing LEED certification. The project laboratories included the following SPM Cryostats, Optics, Sputter Deposition, Laser and High Energy Physics. Designed clean rooms and dust free environments using 1,000, 10,000 & 100,000 class HVAC design.

University of Pittsburgh – Chevron Science Center – Pittsburgh Pennsylvania: Plumbing Engineer for the MEP infrastructure master plan services for the Chevron Science Hall, a chemistry science complex. AEI provided specific solutions that included new emergency power generation, replacement of primary electrical service and bus risers, replacement of plumbing systems and risers, and augmentation of HVAC supply systems and exhaust risers.

Western Maryland Health System – Replacement Hospital, Cumberland, Maryland: Plumbing Engineer for this 7-story, 600,000 sf replacement facility, which included fourteen operating rooms, intensive care unit, cardiovascular unit, interventional imaging, service core, dietary, laboratory, pharmacy, mental health, imaging, emergency department, cancer center, pediatrics and central sterile, helipad, and 275 licensed beds The facility incorporated a central utility plant building, which houses 3,000 tons of water cooled chillers and 21,00 BHp of high pressure steam boilers.

University of Virginia Health System – Children's Hospital – Value Management, Virginia: Plumbing Engineer for the owner's value management review of design documents prepared by others for a 50,000 sf new Children's Hospital.

- U.S. Army Corps of Engineers Lackland Air Force Base (AFB) Dunn Dental Clinic, San Antonio, Texas: Plumbing Engineer for the renovatiion of an existing dental clinic by designing new lighting, power, information technology and fire alarm system layouts. A mass notification system was also designed to comply with latest military standard.
- U.S. Army Corps of Engineers Scott Air Force Base (AFB) Illinois Clinical Replacement, Shiloh, Illinois: Plumbing Engineer for the condition assessment and capacity of existing mechanical installation, for the proposed renovated area, including a new mass notification system to comply with latest military standard.

Veterans Administration - Fayetteville Medical Center – Fayetteville, Arkansas: Plumbing Engineer for feasibility study of a major addition to the existing medical facility. The project included visiting the site and



Chance Cole, CPD Plumbing & Fire Protection Engineer

interviewing the owner/users, surveying existing conditions and capacities, and then studying impact of proposed changes. Completed 3-stage report, documenting existing conditions, deficiencies and code issues, and impact of renovation to existing systems.

US Army Corps of Engineers – Advanced Chemistry Laboratory – Bridging Documents Review, Aberdeen Proving Ground, Maryland: Plumbing Engineer for an existing facility assessment and expansion to a lab wing. Responsibilities included survey of existing systems, calculations of available capabilities and proposing design solutions to unique design constraints.

US Department of Army – Aberdeen Sample Receipt Facility (SRF), Edgewood, Maryland: Plumbing Engineer a new 40,000 sf Sample Receiving Facility, which houses a number of analytical chemical, biological, and radiological laboratories to serve as the intake point for unknown agents and samples. In addition, the facility included substantial forensic lab space for the FBI and DOD.

Prior to joining AEI:

Inner Harbor, – Parcel B, Baltimore, Maryland: Plumbing Engineer for the engineering design as well as construction administrative for piping systems of a 31-story, high-rise, multi-use complex in the Inner Harbor of Baltimore. Building contained two hotels, 241 condominiums, commercial office floors, retail spaces, theater, health club and 4-story parking garage with landscaped courtyard above.

Reston Square Office and Hotel, Reston Virginia: Project Manager and Plumbing Engineer for a two building multi-use complex in the new development of Reston Square. Project consisted of a 6-story office building with commercial restaurant spaces on the lowest floors, 8-story hotel, also with commercial restaurant spaces in the lowest floors, a common courtyard between the two buildings, and a single, continuous underground parking structure beneath both buildings.





Mark Dyck, CLA, LEED AP Principal

Mr. Dyck, CLA, LEED AP, provides leadership for his clientele through demonstrated experience in public process and entitlements, master planning, urban design, and landscape architecture. He has managed projects in the federal, institutional, commercial, residential, and recreational arenas. Mr. Dyck is the President of the Jefferson County Development Authority and has played an influential role in the planning and design of communities and facilities in the eastern panhandle. He has worked in both Canada and the United States and is a leader in the company for the development of sustainable practices as they relate to masterplanning and community design.

CUSTOMS AND BORDER PROTECTION - MEMORIAL AND GLOBAL BORDERS COLLEGE - JEFFERSON COUNTY, WV

Gordon provided civil engineering, professional surveying and landscape architectural services for the proposed 60,000 SF Global Borders College within the Custom's and Border Protection Campus in Harper's Ferry, West Virginia. The design included construction documents for the project and coordination of all tasks with existing site improvements and buildings. Gordon also designed the memorial in front of the academy honoring those who have died while serving Customs and Border. Gordon was also responsible for establishing the LEED strategies for sustainable sites and water conservation.

WELCOME CENTER/SECURITY COMMAND CENTER - JEFFERSON COUNTY, WV

Gordon performed professional engineering, planning, security design, and survey services for the two story Welcome Center and Security Command Center for the Customs and Border Protection Campus located in Harpers Ferry, WV. Site design services included two separate parking areas, utility design, perimeter security design, and entry wall design.

CONFERENCE CENTER AND OFFICER LODGING FACILITY - JEFFERSON COUNTY, WV

Gordon provided engineering, landscape architecture, land surveying, construction administration, and security services for the conference center and a 300 unity lodging facility within the Customs and Border Protection Campus located in Harpers Ferry, WV. The construction documents included full civil design of four separate lodging facilities each consisting of four stories. Gordon also provided a water reuse plan, parking lot design, site utility design, landscaping, and courtyard design. A sidewalk design was also included in the scope to promote walkability to existing sidewalks and trails throughout the campus.

CITY OF RANSON - RANSON, WV

Gordon provided planning and landscape architectural services for the City of Ranson to prepare a conceptual Streetscape Masterplan for approximately 1 mile of Fairfax Boulevard. Much of the existing 100' foot right of way exists without proper lane demarcation and pedestrian friendly streetscape. Gordon recommended context sensitive pedestrian amenities, proper location for bus shelters, crosswalks, and on street parking to promote a walkable community. Several nodes and parks were designed to encourage community gathering and a landscaped median was added to help with storm water runoff.

SAM MICHAEL'S PARK AMPHITHEATRE - JEFFERSON COUNTY, WV

Gordon provided engineering and land planning services during the preparation of a feasibility study and site planning exercise for a 2,000 seat amphitheatre. The design included the review of site impacts and the integration of the proposed facility into the existing park.

FIRM AFFILIATION

Gordon Charles Town, WV office

YEARS OF EXPERIENCE 20

REGISTRATIONS & CERTIFICATIONS

Landscape Architect WV / 282

Landscape Architect - Canada / 264

LEED Accredited Professional

EDUCATION

1991 B.E.S. Environmental Studies (Landscape Architecture), University of Manitoba

4501 Daly Drive Suite 200 Chantilly. VA 20151 703.263.1900

301 North Mildred Street Suite 1 arles Town, WV 25414 i.725.8456

www.whga.com 4501 Daly



Jason Gerhart, PE

Sr. Staff Engineer

Mr. Gerhart, PE, has experience and expertise in project engineering for a variety of residential, commercial, industrial, and governmental projects in the State of West Virginia, with the majority of his work experience located in Jefferson and Berkeley Counties. In addition, Mr. Gerhart has served as a construction inspector for the Pennsylvania Department of Transportation on numerous roadway projects.

CUSTOMS AND BORDER PROTECTION - MEMORIAL AND GLOBAL BORDERS COLLEGE - JEFFERSON COUNTY, WV

Gordon provided civil engineering, professional surveying and landscape architectural services for the proposed 60,000 SF Global Borders College within the Custom's and Border Protection Campus in Harper's Ferry, West Virginia. The design included construction documents for the project and coordination of all tasks with existing site improvements and buildings. Gordon also designed the memorial in front of the academy honoring those who have died while serving Customs and Border. Gordon was also responsible for establishing the LEED strategies for sustainable sites and water conservation.

FIRING RANGE & CONTRACTOR COMPLEX PARKING - JEFFERSON COUNTY, WV Gordon performed professional engineering and surveying design services for the construction of two parking lots within the Customs and Border Protection campus to provide additional parking for the existing firing range building and the Contractor's Complex. Specific design services included site grading, utility design and parking lot design.

FITNESS COURSE DESIGN - JEFFERSON COUNTY, WV

Gordon performed professional engineering, landscape architecture and surveying services for a fitness course within the Customs and Border Protection Campus, located in Harpers Ferry, WV. Specific design services included site grading, obstacle design, planting plans, erosion and sediment control design and storm drainage design for the course.

JEFFERSON PUBLIC SAFETY CENTER - JEFFERSON COUNTY, WV

Gordon provided engineering and survey services for the Jefferson County Public Safety Center located in the Burr Industrial Park in Jefferson County, West Virginia. Engineers were responsible for a complete renovation and redesign of the existing building on site to house the Emergency 911 Communications Center, the Office of Emergency Services, and the Ambulance Authority. Engineers prepared a preliminary engineering design for general stormwater management, storm sewer, sanitary sewer and water design.

BERKELEY COUNTY PUBLIC SERVICE WATER DISTRICT OFFICE & MAINTENANCE BUILDINGS - BERKELEY COUNTY, WV

Gordon provided professional land survey, planning and civil engineering services for a 20,000 square foot office and maintenance facility for the Berkeley County Public Service Water District. Site design services included parking areas, vehicle storage areas, material storage and all required site improvements as required by the Berkeley County Ordinances. Additionally, Gordon was key in helping the Berkeley County Water District in the site selection and evaluation process that examined several parcels prior to the selection of the final location.

FIRM AFFILIATION

Gordon Charles Town, WV office

YEARS OF EXPERIENCE

REGISTRATIONS & CERTIFICATIONS

Professional Engineer PA / PE078142

Professional Engineer WV / 19127

Professional Engineer MD / 40891

EDUCATION

2005 B.S. Civil Engineering, The Pennsylvania State University

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MARK RABINOWITZ

Vice-President, Senior Conservator

PROFESSIONAL EXPERIENCE

Conservation Solutions, Inc., Santa Fe, NM Vice President, Senior Conservator June 2003 to Present

Develop and co-direct conservation treatments and analysis of highly significant historic and artistic works in monuments, sculptures, historic structures, fountains, industrial artifacts and collections.

Conservation and Sculpture Co., Brooklyn, NY

Private Practice/Chief Conservator

1989 - June 2003

Responsible for all phases of the conservation of historic structures, architectural monuments, sculpture, fountains, and industrial artifacts. Duties include design and implementation of conservation treatments and master plans, cost estimating, historic documentation and report writing, technical studies and contract document preparation, project management, and training.

New York City Parks Department, New York, NY

Chief Consulting Conservator

1997 - 2003

Director of conservation for all statuary and monuments through the Citywide Monuments Program. Trained and oversaw teams of monument conservation technicians and graduate student interns performing treatments and maintenance on sculptural monuments throughout New York City Parks. Research, design and specify conservation treatments for monuments and conservation capital projects. Assist in grants applications and administration.

Central Park Conservancy

Deputy Chief of Operations for Preservation

1991 - 1997

Directed operations and preservation of entire built environment of Central Park, NYC. Coordinated and oversaw all preservation and maintenance staff, specified and directed all capital preservation work on built environment of New York City's premier historic park. Established and directed award winning monument conservation and in-house restoration programs.

Sculptor

1975-1991

Independent artist in traditional materials specializing in stone, bronze, wood. Maintained independent practice as a contemporary sculptor in New York City. Specialized in the use of historic and traditional materials and themes in a modern context. Works in marble, wood and bronze exhibited in one person and group shows in galleries in New York, Brussels and Paris. Recipient of two grants to live and work in stone carving and quarrying centers outside Verona and the Alta Adige/Sud Tyrol in Italy, 1984, 1986. Numerous group exhibitions, and solo shows. Works in public and private collections.

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MARK RABINOWITZ (Page 2) EDUCATION

Rhode Island School of Design, Providence, RI Bachelor of Fine Arts, Sculpture, 1975

"Polarized Light Microscopy," NY Microscopical Society, NJ, 4/2002.

Dutch Painting Techniques, NY Academy of Art, 3/2002.

Historic Lime Conference, Virginia Lime Works, Lynchburg, VA, 1/2002.

Historic Masonry Conservation, NPS, New York City, NY, 1993.

The Conservation of Outdoor Monuments, NPS, Washington, DC, 1991.

PUBLICATIONS

"Removal of Mircobiological Fouling on Adair Marble at the National Law Enforcement Officers Memorial" Mark Rabinowitz, Roy Cullimore, S. Caitlin vonHedemann, George Wheeler. Pierre de Jardins: proceedings of the ICOMOS, SIIF International Conference on Conservation of Stones in Gardens, Paris, France, June, 2011.

"Surface Preparation and Coating Application Practices for the Conservation of Large-Scale Metal Artifacts." Joseph Sembrat, Mark Rabinowitz, Patricia Miller, and Justine Bello. Metal 2010: proceedings of the International Conference on Metals Conservation, Charleston, SC. 11-15, October 2010.

"Challenges in Treating Decorative Architectural Metals." Traditional Building, March 2010

"Enzymatic Decolorization of Bacterial Pigments from Culturally Significant Marble." Nick Konkol, Chris McNamara, Joe Sembrat, Mark Rabinowitz, and Ralph Mitchell. Journal of Cultural Heritage, 2009.

"Let Us Raise a Standard to Which The Wise and The Honest Can Repair...": The Preservation of Washington Square Arch, Robin Gerstad, Mark Rabinowitz. Bulletin of the Association for Preservation Technology, Summer 2005.

"The Use And Effectiveness of Dispersed Hydrated Lime In Conservation of Monuments And Historic Structures." Patty Miller, Joe Sembrat, Mark Rabinowitz. Post-Prints 2005 International Lime Symposium, Orlando, FL, March 9-11, 2005

"Surface Repairs to Architectural Terra Cotta." Mark Rabinowitz Traditional Building, November 2004.

"The Conservation of the Confederate Memorial." With Camille Bowman. Traditional Building, May-June 2004.

"Conservation of the Brooklyn Memorial Arch." Traditional Building, May-June 2000.

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MARK RABINOWITZ (Page 3)

"Restoration of the Bethesda Terrace Tile Ceiling," with Peter Champe. Bulletin of the Association for Preservation Technology, Summer 1999.

"Central Park Conservancy Monuments Conservation Program." Cultural Resources Management, U.S. Department of the Interior, NPS, January 1995.

PRESENTATIONS

"Removal of Mircobiological Fouling on Adair Marble at the National Law Enforcement Officers Memorial" Pierre de Jardins: ICOMOS, SIIF International Conference on Conservation of Stones in Gardens, Paris, France, June, 2011.

"Overcoming Challenges to Decorative Metal Finishes," with Justine Bello, Association for Preservation Technology Annual Conference, Denver, CO October 2010

"The Comprehensive Conservation of Statuary at Vizcaya", Vizcaya Museum and Gardens, Miami, FL March 2010

"Stone Treatment at the New York Public Library.", ICOMOS, New York October 2009

"Conservation of Louis Comfort Tiffany's Daffodil Terrace from Laurelton Hall," with John Griswold. American Institute for Conservation Annual Meeting, Denver, CO April 2008

"When the Museum Building is the Collection: Issues of Conservation, Maintenance and Collections Care for Museums Where the Structure and Associated Features (Interiors, Gardens, Outdoor Sculpture) Are Major Components of the Collection," Program Chair. Building Museum Symposium 2007, Mid-Atlantic Association of Museums, Washington, DC February 23, 2007.

"The Stabilization, Conservation Treatment and Exhibition Mounting of Two Saturn V Command Modules," with Joe Sembrat and Patty Miller. Second Symposium on Corrosion & Preservation of Historic Artifacts, Smithsonian Institution Museum Support Center Theatre, Silver Spring, MD October 2007.

"A Paradigm Shift in Industrial Artifact Conservation—The Conservation of the Saturn V Rocket Located at the Johnson Space Center in Houston, TX," with Joe Sembrat and Patty Miller Symposium on Corrosion & Preservation of Historic Artifacts, Suitland, Maryland November 2006

"Gilding the Sherman Memorial" Gilding at the Smithsonian, Washington, D.C. September 23, 2006

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MARK RABINOWITZ

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"The Restoration of Hurricane Damage at Vizcaya" Vizcaya Museum and Gardens, Miami, FL, July 31, 2006

"The Use of Internal Armatures in Zinc Sculpture Restoration" American Institute for Conservation Annual Meeting, Objects Specialty Group, Providence, RI June 19, 2006

"Introduction to Masonry Conservation" Florida Trust for Historic Preservation 2006 Conference, St. Augustine, FL May 18,2006

"The Use And Effectiveness of Dispersed Hydrated Lime In Conservation of Monuments And Historic Structures," with Patty Miller, International Lime Symposium, Orlando, FL March 9-11, 2005

"Diagnosing and Prescribing Treatments for Historic Masonry," with Patty Miller, The Florida Trust for Historic Preservation: Ximenez-Fatio House Museum, St. Augustine, Florida January 2005

"Let us Raise a Standard to Which the Wise and The Honest Can Repair...: The Preservation of Washington Square Arch, "with Robin Gerstad. ATP Conference, Galveston, TX November 2004

"Specifying Appropriate Restoration of Historic Lighting." Illuminating Engineering Society, New York, NY February 2003

"Sculpture, Creating, Caring and Collecting." Brookgreen Gardens, SC September 2002

"Conservation of Washington Square Arch." Program Chair. Expert Advisory Committee, City Parks Foundation/New York University
November 2001

"The Re-gilding of the Sherman Memorial." American Institute for Conservation, Annual Meeting, Architecture Specialty Group, Dallas, TX
June 2001

"Options in Training Sculpture Maintenance Personnel." Program Chair. Heritage Preservation/SOS!, Washington, DC November 1996

"Central Park Masonry Arch Restoration Program." American Institute for Conservation, Objects Specialty Group, Norfolk, VA June 1995

"Bronze Casting and Conservation." Cleveland Museum of Art, Cleveland, OH July 1994

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MARK RABINOWITZ (Page 5)

"The Conservation of Outdoor Bronzes." National Park Service, Maintenance of Outdoor Sculpture, Chicago, IL
June 1992

"Losing Games: Conservation Issues of Outdoor Statuary as Playground Equipment," with Providencia Velazquez. American Institute for Conservation, Objects Specialty Group, Buffalo, NY June 1992

AWARDS

Florida Trust for Historic Preservation

Outstanding Achievement in the Field of Restoration/Rehabilitation Coral Gables Museum, Coral Gables, FL, April 2011

American Academy in Rome Mark Hampton Prize in Historic Preservation & Conservation, 2011

New York Preservation League Award for Excellence,

New York Public Library, New York, NY, 2011

Dade Heritage Trust

Outstanding Restoration of Historic Site Award Flagler Memorial, Miami FL, April 2009

New York Construction

Best of 2004 Award

Restoration Award of Merit - Washington Square Arch, New York, NY, 2004

Greenwich Village Historical Society

14th Annual Village Awards for the Restoration of the Washington Square Arch, New York, NY, 2004

Lucy Moses Preservation Awards

New York Landmarks Conservancy, New York Public Library, New York, NY, 2011

New York Landmarks Conservancy, Washington Square Arch, New York, NY, 2004

New York Landmarks Conservancy, for Conservation of Sculpture in New York, NY, 2003

New York Landmarks Conservancy, for Restoration of Winterdale Arch, Central Park, NY, NY, 1995

Awards for Excellence

New York Art Commission, for conservation of sculptures in New York City, NY, 2002 New York Art Commission, for conservation of sculptures in Central Park, NY, NY, 1993

Best Conservation Treatments

Heritage Preservation/SOS!, for Oak Bluff Soldiers' Memorial, MA, 2002 Heritage Preservation/SOS!, for Brooklyn Memorial Arch, NY, 2000

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MARK RABINOWITZ

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Best Monument Restoration

New York City Dept. of Parks, for Brooklyn Memorial Arch, NY, 2000

Maestro D'Arte Della Pietra

Antica Libera Corporazione Dell'Arte Della Pietra, Sant'Ambrogio di Valpolicella, Italy, 1984

EXHIBITIONS (Selected)

Trabia Gallery, New York

Solo Exhibition 1989

Bridgewater Gallery, New York

Solo Exhibition 1985

Propect Park, Dante Park at Lincoln Center, New York

Temporary Exhibitions 1990-1992

The City of Greenwich, CT

Permanent collection

PROFESSIONAL AFFILIATIONS

American Academy In Rome

Fellow 2011

Association for Preservation Technology

Member of the Board of Directors, 2008-2009

American Institute for Conservation (AIC)

Professional Associate 1995; Fellow 2004

APPOINTMENTS

New York City Art Commission

Conservation Advisory Group, 1993-1997

SOS!, Heritage Preservation Inc.

Outdoor Sculpture Maintenance Advisory Group, 1995-1996

TEACHING

Hispanic Society of America

City Parks Foundation, Central Park Conservancy

Trained conservation and historic preservation graduate students on treatment of outdoor monuments and historic structures, sponsored by the Samuel H. Kress Foundation, 1993-2002

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MARK RABINOWITZ (Page 7)

New York University

Conservation Center, New York, NY Lecturer on stone carving techniques, 1995-2001

Fashion Institute of Technology

Restoration Department, New York City, NY Lectures on monuments conservation, 1998-2002

Long Island University

Brooklyn Campus, NY

Adjunct Associate Professor, Sculpture, 1994-95

SOS!, NIC Conservation

Assessment Trainer,

New York City, 1991-92

Lacoste School of the Arts in France

Cleveland Art Institute, Provence, France

Professor of Sculpture, summer and fall semester, 1990

Penland School of Craft

Penland, NC

Sculpture Instructor, Summer 1980

R. W. Brown & Associates Construction Cost Consultants

RÉSUMÉ Robert W. Brown, CCE

EXPERIENCE

Mr. Brown is a Senior Architectural/Structural/Civil Cost Consultant. In 1969 he received a Bachelor's Degree in Building Construction from Auburn University, and subsequently completed graduate courses in Business Administration.

Mr. Brown's experience in Cost Consulting and preparation of Cost Estimates/Reports has been accumulated in over 1,300 diverse projects and 30 years of service to the Construction Industry. Mr. Brown specializes in providing Cost Estimates for construction projects from Pre-Design Criteria through Contract Documents. Mr. Brown's Cost Consulting Experience includes a myriad of Cost Studies including Value Engineering, Life Cycle Costing, Payment Requisition Analysis and Reconciliation, Bid Evaluation, Change Order Evaluation and Negotiation, Market Surveys, Economic Analysis, Project Management Work and Expert Testimony/Litigation Support.

Mr. Brown was the Chief Estimator of a large cost consulting firm where he worked for 17 years prior to forming and managing his own Cost Consulting firm. As Chief Estimator, he was responsible for the direction and work flow of the twelve person estimating-technical team, as well as, estimating a large percentage of the projects himself.

As the Owner of his own firm since 1989, Mr. Brown manages and is responsible for every aspect of all projects. He provides a single source of contact for the client, interdisciplinary coordination and quality assurance. Mr. Brown maintains a rate of accuracy for his Cost Estimates which averages less than 5% higher than the low responsive bid. Mr. Brown created and maintains R.W. Brown and Associates' Cost Data Bank to provide the most current unit prices for each Estimate. Mr. Brown is well-versed and proficient in all the Cost Estimates/Reports formats and will provide the Estimate/Report in the format that is most beneficial to the client's needs.

PUBLICATIONS

"The Cost of Accessibility in Public Buildings: A Study to Retrofit Costs to Provide Access to Handicapped Occupants in Multilevel Structures," The National Center for a Barrier Free Environment.

"The Cost of Accessibility," Cost Engineering, copyright May 1988.

PROFESSIONAL CERTIFICATIONS AND MEMBERSHIPS

Certified Cost Engineer (CCE), Association for the Advancement of Cost Engineering (AACE)

Active Member, Association for the Advancement of Cost Engineering (AACE)

Certified Estimator, American Society of Professional Estimators (ASPE)

Graduate, Value Engineering Training, General Services Administration (GSA)

STATEMENT OF FIRM'S ABILITY

Provide a statement of the firm's ability to handle the project in its entirety.

Quinn Evans Architects has a proven track record in successfully completing complex project involving historic building and structures. We would be happy for you to contact the references for each of the projects listed herein. The DC office of Quinn Evans Architects has a professional staff which includes 20 licensed architects and 10 architectural interns. Of these 30 individuals, 12 have both architectural degrees with secondary specialty degrees or certificates in historic preservation. A project of this type and size can be easily accommodated in its entirety within the anticipated workload in 2012.



OTHER STATEMENTS

STATEMENT OF FIRM'S ACCEPTANCE AND UNDERSTANDING

This is a statement of Quinn Evans Architects' acceptance and full understanding that any and all work produced as a result of the contract will become property of the Agency and can be used or shared by the Agency as deemed appropriate.

STATEMENT OF LITIGATION HISTORY

Quinn Evans Architects has claims completed on two projects: Lamond Recreation Center and Sudworth Building. Both claims have been settled to the satisfaction of the client and QEA.



PROJECT MANAGEMENT

Provide information on the personnel who will manage and persons proposed to be assigned to the project. Provide locations of firm's offices and indicate from where the project will be managed and the work performed.

The project team will be led by Project Director, Baird Smith, FAIA, FAPT. Mr. Smith brings over 35 years of dedicated experience in historic architecture and serves as QEAs Director of Preservation. He has specialized in preservation and rehabilitation projects with an emphasis on technology, materials science and appropriate treatments. He has a breadth of experience in building technologies of the 18th, 19th and early 20th century. He is nationally recognized as an expert in brick and stone masonry deterioration causes and repair procedures.

He will work in tandem with QEA staff assigned - Ilene Tyler, FAIA, FAPT, Lead Investigator / Senior Historic Architect and Thomas Jester, AIA, LEED AP, Project Architect.

Ms. Tyler brings over 30 years of preservation experience, including 20 years with Quinn Evans Architects. She is active in the Association of Preservation Technology and has authored two articles published in the APT Bulletin, including "The Greening of the Samuel T. Dana Building: A Classroom and Laboratory for Sustainable Design" and "Replicating the John J. Earley Concrete Mix to Restore the Nashville Parthenon."

Mr. Jester brings high levels of knowledge surrounding historic materials and methods with a focus on mid-century technologies. He edited Twentieth-Century Building Materials: History and Conservation, a seminal work on the preservation of modern-era architecture. He served as one of the principal organizers of the Preserving the Recent Past (1995) and Preserving the Recent Past 2 (2000) conferences, and co-authored Preservation Brief 32: Making Historic Properties Accessible. He co-edited the "Mending the Modern" special issue of the APT Bulletin, served as one participated in two International Council of Monuments and Sites (ICOMOS) expert meetings on Twentieth Century Heritage (Helsinki, 1995, and Mexico City, 1996), and presented at the Wood and the Modern Movement Symposium (1999) sponsored by DOCOMOMO. He is currently co-chair of the APTI Special Technical Committee on Modern Heritage.

CONSULTANTS

We have assembled a team of sub consultants to complete the scope of work of the renovation. Team members include:

- Affiliated Engineering Incorporated MEP Engineering
- WH Gordon Associates Civil/Site Engineering
- Conservation Solutions Materials Conservation
- R.W. Brown Associates Cost Estimating

Firm qualifications statements are provided in the following pages.

WASHINGTON, DC ANN ARBOR, MI DETROIT, MI MADISON, WI

QUINN EVANS





QUINN EVANS ARCHITECTS

Baird Smith. FAIA, FAPT Ilene R Tyler, FAIA, FAPT Tom Jester, AIA, LEED AP

AFFILIATED

MEP Engineer

Scott Spangenberg, PE, LEED AP Michael Soong, PE Chance Cole, CPD

WH GORDON

Landscape and Civil

Mark Dyck, CLA, LEED AP Jason Gerhart, PE

RW BROWN ASSOCIATES

Cost Consultar

Robert Brown

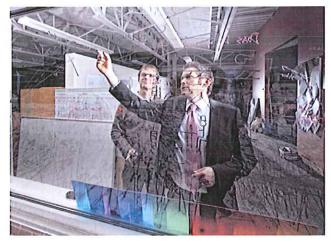
CONSERVATION SOLUTIONS

Materials Conservation

Mark Rabinowitz

FIRM PROFILE

Affiliated Engineers, Inc.



Affiliated Engineers, Inc. (AEI) is a technical consulting, design, and engineering firm providing innovative solutions for complex and large scale projects worldwide, supporting the excellence of a diverse clientele. Practicing since 1927 and formally incorporated into its present state in 1978, AEI is owned by 23 principals who develop and maintain client relationships and provide project leadership. Based in 11 offices throughout the U.S. and abroad, the firm's staff of 521 includes 170 LEED® Accredited Professionals.

We built our practice with equal commitments to technical expertise and market knowledge, within a culture of interdisciplinary discourse and critical idea exchange. Solutions in each market specialty are informed by expertise in many markets, just as a project in any given location benefits from experience in that project type around the world.

The firm has developed a reputation for excellence in energy and sustainability, science and technology, healthcare, utility infrastructure, industrial test facilities, higher education, federal government, cultural and public, process and clean manufacturing, and commercial and office buildings. Yet for all of AEI's growth and diversification, our focus remains unchanged: outcomes that facilitate productivity, reliability, efficiency, and versatility, and that ensure safety, comfort, and sustainability. Throughout all markets of specialization, AEI is uniformly dedicated to a vision of confronting challenges facing society with insight and innovation.

AEI is committed to thorough client communication, fully understanding distinct client needs and applying the strategies and technologies that will provide the greatest immediate and long-term benefit to client operations. Project teams are thoughtfully assembled matching individual experience and expertise to unique project challenges, resulting in insightful design that responds to challenges and supports our clients' business goals.

Our involvement begins early, during programming and concept development, and continues through construction and occupancy. This ensures the engineering systems meet project requirements and that adequate space is allocated for the systems before a final design is determined. Our goal is to integrate these systems into the form of the facility and allow the flexibility needed for future development.

Our standard is the highest level of responsive service, providing feedback, offering alternative solutions, and effectively implementing client decisions.

Services

Mechanical Electrical Piping, Plumbing Fire Protection Technology Sustainability Pivotal Lighting Design Utility Infrastructure Master Planning Mission Critical Instrumentation & Controls Process Industries/Manufacturing **Project Services** Cost Estimating Commissioning

Offices

Chapel Hill, North Carolina Chicago, Illinois Gainesville, Florida Houston, Texas Madison, Wisconsin Manama, Kingdom of Bahrain Metro Washington, DC Phoenix, Arizona San Francisco, California Seattle, Washington Tampa, Florida



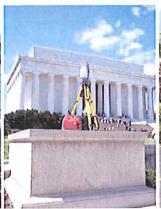
Recognizing the significant impact of our work on society and the global environment, AEI brings a fundamental commitment to ensuring that our work reflects the highest standard in sustainable design practices. By supporting the sustainability-focused career development of our people, we support our clients with ongoing innovation in sustainable design.

gordon FIRM OVERVIEW

William H. Gordon Associates, Inc.









William H. Gordon Associates, Inc. (Gordon) is recognized as a leading provider of professional consulting services to public and private sector clients in the Metropolitan Washington, DC region. Founded in Northern Virginia in 1976, Gordon has assembled civil engineers, land planners, landscape architects, surveyors, and security/law enforcement professionals located regionally to provide comprehensive, multi-disciplined services to address the needs of government and business.

Capabilities

- · Site Consulting Services
- Civil Engineering
- Survey and Mapping
- Landscape Architecture
- Site Security
- · Land Planning/Entitlement

Site Consulting Markets

- Land Development
- Public Facilities
- · Parks and Recreation
- Transportation
- Utilities
- Water Resources

YEARS IN BUSINESS

35

SIZE OF FIRM

80 employees

OFFICE LOCATIONS

- · Chantilly, VA office
- Charles Town, WV office

VIRGINIA SMALL BUSINESS LICENSE 672361

"Gordon's mission is to provide value-added professional consulting services associated with the development and stewardship of land and/or facilities."

4501 Daly Drive Suite 200 Chantilly. VA 20151 703.263.1900

301 North Mildred Street 'te 1 .rles Town, WV 25414 JU4.725.8456

www.whga.com



COMPANYOVERVIEW

Established in July 1999, CSI is a unique, full-service, solutions-oriented conservation firm with extensive expertise in the analysis and treatment of museum artifacts. We are a small business capable of handling small assessments to large scale projects ranging in price from \$2,000-\$5,000,000.

Beyond our expertise in the specifics of this type of work, we are committed to the overriding ethical criteria of the conservation field. We pride ourselves on our ability to develop sensitive and creative solutions to complex conservation problems using a combination of the latest technology and the finest traditional artistry. Each project is thoroughly reviewed, and all alternatives exhaustively explored, until we are confident we can achieve a client's goals while maintaining standards of minimal intervention, fidelity to the artist or architect's original intent, reversibility, immaculate implementation, and complete documentation. We maintain a current exhaustive knowledge base of technical means and skilled practitioners in the extraordinarily broad range of materials that we treat. We can call on corrosion engineers, testing laboratories, biochemists, metalworking specialists, historic coatings analysts and coatings application specialists, all of whom have an understanding of the specific problems of historic and architectural elements. We are confident that we bring un-matched abilities to the assessment of this significant historic engineering feat.



All work is assessed, coordinated and performed or overseen by staff and contracted conservators under the direction of a CSI Senior Conservator. The two Senior Conservators are supported by an in-house staff of Conservators, Project Managers, Technicians, and Administrators based in District Heights, MD, or at our corporate headquarters in Santa Fe, NM.

We have extensive experience in the preservation of historical and architectural elements We constantly update our knowledge through attendance and presentations at conferences on art, architecture and archeological artifact preservation. CSI conservators have presented at and/or attended scores of conferences relevant to the conservation treatment of outdoor monuments and cemetery markers. These have included:

- Annual conferences of American Institute for Conservation in 1991,1992,1995, 1997, 1999, 2000, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011
- Annual conferences of Association for Preservation Technology in 1996 - 2011
- Annual conferences of ICOM in 1996 2009
- National Park Service Conservation of Outdoor Monuments, 1991, 1993
- Stone conferences of ICOMOS, 2008, 2011

Please see each conservator's resume for additional publications and presentations.

833 EAST PALACE AVE. SANTA FE, NEW MEXICO

CONSERVATIONSOLUTION.COM

ABILITY TO PROVIDE SERVICES

Provide a statement or evidence of the firm or team's ability to provide services.

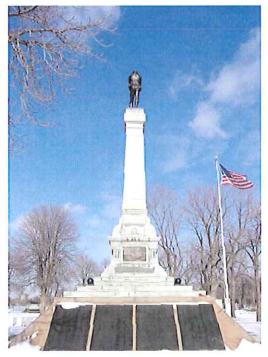
We envision that this project will involve between 4 and 6 QEA staff members managed from the DC office, and key individuals from the 4 sub-consultants. This is a very manageable size consulting team. The assigned QEA staff have all worked together on similar projects over the last 5 years.



MONUMENT INSPECTIONS

NATIONAL CEMETERY ADMINISTRATION











PROJECT SUMMARY

Quinn Evans Architects inspected more than a dozen monuments of different materials at six different locations across the eastern United States. The monuments are in historically important cemeteries that honor veterans in service to the United States of America. Quinn Evans Architects inspected the completed conservation and repair treatments and the cyclical and maintenance plans, prepared by conservators for each site, and provided a written and illustrated report of observations and recommendations.

PROJECT DETAILS

MONUMENT MATERIALS INCLUDED: GRANITE, MARBLE, CONCRETE BRONZE, CAST IRON

SIZE: VARIES

COST: \$39,850

COMPLETED: ONGOING 2010 - PRESENT

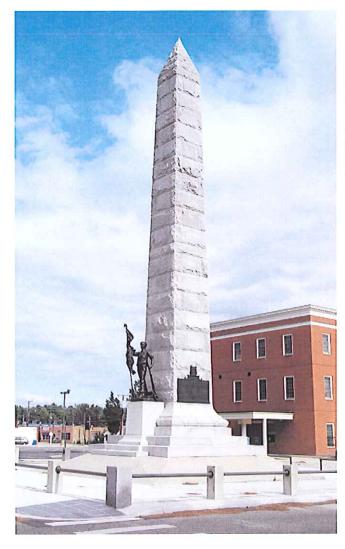
CLIENT / REFERENCE

DEPARTMENT OF VETERANS AFFAIRS
GREGORY L. HANKS, CONTRACTING
OFFICER
NATIONAL CEMETERY ADMINISTRATION
CONSTRUCTION SUPPORT DIVISION
810 VERMONT AVENUE, NW
WASHINGTON, DC 20420
202.467.8935

PETERSBURG MEMORIAL

PETERSBURG NATIONAL BATTLEFIELD PARK, PETERSBURG, VIRGINIA









PROJECT SUMMARY

Quinn Evans Architects designed the rehabilitation of the largest monument within the Petersburg National Battlefield for the National Park Service. The project, now under construction, includes stone repointing and cleaning, as well as conservation of the bronze statue by noted sculptor Frederick Wellington Ruckstuhl. Site improvements include installation of a new guard rail system to replicate the appearance of the historic railing in a manner that makes the monument plaza accessible for persons with disabilities. The project also includes depression of an overhead power line to improve the monument sightlines and integrates new crosswalks.

PROJECT DETAILS

COMPREHENSIVE REHABILITATION OF STONE AND BRONZE MONUMENT

ERECTED IN 1909 TO COMMEMORATE
THE PENNSYLVANIA THIRD DIVISION
ASSAULT ON A CONFEDERATE
POSITION.

SIZE N/A COST: \$276,000 COST: \$39,850

COMPLETED: 2010

CLIENT / REFERENCE

NATIONAL PARK SERVICE
RICHARD CHILCOAT
ARCHITECTURAL PRESERVATION DIV.
115 JOHN STREET
LOWELL, MA 01852
978.970.5167

AFRICAN AMERICAN CIVIL WAR MEMORIAL

NATIONAL PARK SERVICE WASHINGTON, DC









PROJECT SUMMARY

In 1998 Dr. Frank Smith and General Colin Powell lead the groundbreaking for the African American Civil War Memorial. The 209,145 names on the Wall of Honor are engraved on plaques behind the monumental bronze statue entitled, The Spirit of Freedom by Ed Hamilton, sculptor. Quinn Evans Architects is leading the conservation project for the memorial which will address routine maintenance and repairs to the various elements of the memorial. This will include addressing damage from the public, including youth on skateboards, as well as minor deterioration to the stone elements from exposure to the weather.

PROJECT DETAILS

MONUMENT MATERIALS INCLUDED: LIMESTONE, GRANITE, BRONZE, STAINLESS STEEL,

SIZE:

COST: \$300,000

COMPLETED: ONGOING 2011 - PRESENT

CLIENT / REFERENCE

NATIONAL PARK SERVICE STEVE DOULIS, A/E PROJECT MANAGER NATIONAL CAPITAL REGION 1100 OHIO DRIVE, SW WASHINGTON, DC 20242 202.619.6371

MIDLAND COUNTY VETERANS' MEMORIAL

MIDLAND, MICHIGAN









PROJECT SUMMARY

Quinn Evans Architects developed a concept design and sketch drawings for restoration of the Midland County Veterans' Memorial located in downtown Midland, Michigan. The approved design reflects the goal of the veterans to honor soldiers from the Midland area who fell during the World War I, World War II, Korea, Viet Nam, Afghanistan, Iraq, and unknown future conflicts.

PROJECT DETAILS

GRANITE & LIMESTONE

BRONZE BAS RELIEF TABLET DESIGNED IN 1950 BY SCULPTOR RENE PAUL CHAMBELLAN

SIZE: 1217 SF

COST: \$500,000

COMPLETED: DESIGN PHASE 2011

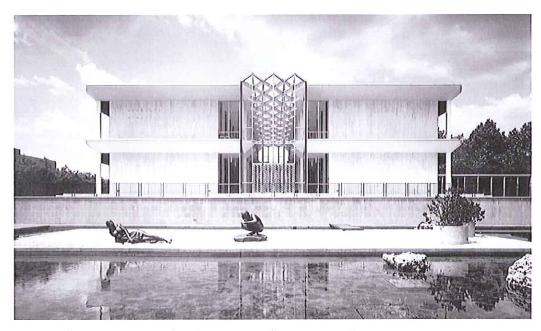
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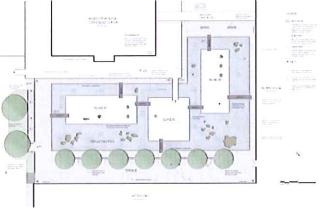
DOW CHEMICAL COMPANY, ENGINEERING SERVICES CHUCK PLESSNER, P.E. MICHIGAN OPERATIONS 1400 BUILDING MIDLAND, MI 48667 989.636.5043

McGREGOR POOL

WAYNE STATE UNIVERSITY, DETROIT, MICHIGAN









PROJECT SUMMARY

Quinn Evans Architects provided comprehensive design services for the restoration of Minoru Yamasaki's historic reflecting pool at WSU's McGregor Center. Years of neglect has left the pool in a deteriorated state unable to hold water, while previous renovations replaced the once open circulation paths with strips of landscape. QEA is leading the effort to recapture Yamasaki's original, tranquil design by repairing the pool structure, restoring the sculpture gardens, providing new filtration and sanitization systems, and repaving the terrace to allow free and accessible movement.

PROJECT DETAILS

DESIGNED BY ARCHITECT MINORU YAMASAKI

CONSTRUCTED 1958

LISTED ON THE NATIONAL REGISTER OF HISTORIC PLACES IN JANUARY 2011

SIZE: 23,000 SF

COST: 1,100,000

COMPLETED: SUMMER 2012

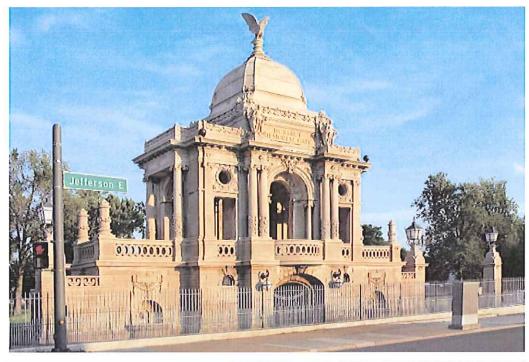
CLIENT / REFERENCE

WAYNE STATE UNIVERSITY
JIM SEARS, ASST. VICE PRESIDENT FPM
FACILITIES PLANNING AND MANAGEMENT
5454 CASS AVENUE
DETROIT, MI 48202
313.577.4301

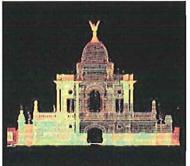
HURLBUT MEMORIAL GATEWAY

DETROIT, MICHIGAN









PROJECT SUMMARY

After suffering from years of vandalism and neglect, QEA provided documentation for the replacement of damaged limestone blocks, reconfiguration of the parkfacing stairway and repair of the eagle sculpture perched atop the gate. Point Cloud technology was used to create detailed drawings of intricate features of the monument. The project included replacement stone, stone patches, repaired cracks and similar restoration work.

ACCOLADES

2010, Masonry Honor Award, Masonry Institute of Michigan

PROJECT DETAILS

CONSERVATION OF HISTORIC
MONUMENTS

132 FEET WIDE BY 50 FEET HIGH
CONSTRUCTED IN HONOR OF
CHAUNCY HURLBUT

SIZE: 200 SF / 20 ACRES

COST: \$994,000
COMPLETED: 2008

CLIENT / REFERENCE

DETROIT DEPT OF WATER AND SEWARAGE GEORGE ELLENWOOD, ASST DIRECTOR 735 RANDOLPH, SUITE 1001 DETROIT, MI 48226 313.964.9460

MUNICIPAL AUDITORIUM

KANSAS CITY, MISSOURI









PROJECT SUMMARY

Municipal Auditorium is a 9,287-seat multi-purpose arena comprising a city block in downtown Kansas City. Built in 1936, it has been called an Art Deco wonder.

QEA conducted a survey and assessment of the building's exterior envelope and prepared a comprehensive report on the conditions of the masonry and recommendations for the building's exterior cleaning and repair. QEA directed a series of cleaning tests to determine the most effective & safest treatments to restore the exterior limestone.

PROJECT DETAILS

EXTERIOR CONDITIONS ASSESSMENT REPORT

BUILT IN 1936 IN ART DECO STYLE

SIZE: 30,000 SF

COST: REPORT: \$46,000 PROJECT \$13,700,000

COMPLETED: 2010

CLIENT / REFERENCE

RALPH DAVIS, P.E.

PROJECT DELIVERY MANAGER
CITY OF KANSAS CITY
OFFICE OF THE CITY MANAGER
CITY HALL, 18TH FLOOR
414 EAST 12TH STREET
KANSAS CITY, MO 64106
816-513-2740

MULTIPLE PROJECTS - HARPERS FERRY NATIONAL HISTORICAL PARK

NATIONAL PARK SERVICE, HARPERS FERRY, WEST VIRGINIA









PROJECT SUMMARY

Quinn Evans Architects completed the design for selective rehabilitation and alterations to three NPS office buildings at the Harpers Ferry Training Center - Anthony Library, Bryd Brady House, and Cook Hall. These buildings, and the surrounding campus, were part the historic Storer College between the years of 1904-1955. This campus facility was acquired in total by the NPS in 1962 to be utilized for the mission of the Harpers Ferry National Historic Park and the newly created Harpers Ferry Training Center. Work focused on the provision of accessibility and repair and restoration of finishes.

PROJECT DETAILS

MATERIALS INCLUDED: STONE, PLASTER, WOOD

SIZE: N/A

COST: \$1,500,000

COMPLETED: 2009

CLIENT / REFERENCE

NATIONAL PARK SERVICE FRITZ RUSHLOW, EXHIBITS MANAGER GAMBRILL HOUSE 4801A URBANA PIKE FREDERICK, MARYLAND. 21704 301.663.8206

WASHINGTON, DC ANN ARBOR, MI DETROIT, MI MADISON, WI

QUINN EVANS

NASH PROPERTY

HARPERS FERRY NATIONAL HISTORICAL PARK, WEST VIRGINIA









PROJECT SUMMARY

To prepare to the adaptive reuse of this 20th century farm into an educational facility for youth and collegeaged students, Quinn Evans Architects designed the rehabilitation of historic buildings on the site. A barn and main house on the property will be rehabilitated to house classrooms, a cafeteria, housing for visiting faculty and administrative offices. The firm also set in place guidelines for sustainable approaches so that the facility can serve as a model and a laboratory for new environmental technologies.

PROJECT DETAILS

RENOVATION OF EARLY 20TH
CENTURY FARM FOR USE AS PUBLIC
EDUCATIONAL FACILITY

LISTED IN THE NATIONAL REGISTER OF HISTORIC PLACES

SIZE: 11 ACRES

COST: \$1,500,00

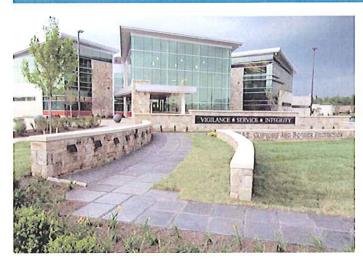
COMPLETED: 2005

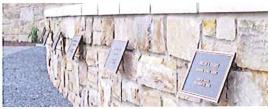
CLIENT / REFERENCE

NATIONAL PARK SERVICE
PETER DESSAUER
HARPERS FERRY NATIONAL HISTORICAL
PARK
PO BOX 65
HARPERS FERRY, WEST VIRGINIA 25425
304.535.6040

gordon EXPERIENCE

Customs & Border Protection Memorial HARPERS FERRY, VIRGINIA







WILLIAM H. GORDON ASSOCIATES, INC. (GORDON) provided civil engineering, planning, and landscape architecture services for the programming, planning for the Customs and Border Protection Memorial located near Harpers Ferry, WV.

The memorial was dedicated on May 17, 2011 to officers who have been killed in the line of duty. Gordon was specifically singled out by the Director of the campus to design the memorial as a result of our previous design efforts on campus.

The memorial is located in front of the Global Borders College and is a national monument that Gordon had the privilege of designing. Amazingly, this memorial was designed and constructed in less than three months.

Inscriptions on two of the granite monuments within the memorial read:

"These honored guardians bear witness to our unyielding dedication to preserve and protect our homeland and to ensure that the light of Liberty that illuminates this Nation shall never be extinguished.

Though these proud sentinels have departed, their legacy endures; resonating in our hearts and guiding us in our duty. It now remains for us to dedicate ourselves to the continuation of the noble purpose for which these fallen have given their last full measure of devotion; that we shall resolve to pay any price, bear any burden, and meet any hardship to secure the blessings of freedom for all posterity."

This project was one of many projects undertaken by Gordon for this Advanced Training Center Campus. Gordon provided services for the Campus Master Plan, Leadership Academy, Lodging Facility, Central Dining Facility, Welcome Center, Shower and Locker Room Facility, and Infrastructure.

OWNER

US Government

SERVICES PROVIDED

- Civil Engineering
- Landscape Architecture

CONTACT INFORMATION

Chris White T: 301-724-5921 Address: 400 Koonce Rd Harpers Ferry, WV 25425

DATE COMPLETED:

May, 2011

PROJECT SIZE AND COST:

The Global Borders College and Memorial were approximately 60,000 SF. Gordon's professional services fee for this project was approximately 200K while the memorial portion was about 10K.

4501 Daly Drive Suite 200 Chantilly. VA 20151 703.263.1900

301 North Mildred Street te 1 .arles Town. WV 25414 304.725.8456

www.whga.com



RFQ COPY

TYPE NAME/ADDRESS HERE

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

Request for Quotation GSD126417

GSD126417

1

ADDRESS CORRESPONDENCE TO ATTENTION OF

ADDRESS CHANGES TO BE NOTED ABOVE

KRISTA FERRELL 04-558-2596

DEPARTMENT OF ADMINISTRATION GENERAL SERVICES DIVISION JOBSITE SEE SPECIFICATIONS

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STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

West Virginia Code §5A-3-10a states: 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 the debt owed is an amount greater than one thousand dollars in the aggregate.

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.

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "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.

EXCEPTION: The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this 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.

Under penalty of law for false swearing (West Virginia Code §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

WITNESS THE FOLLOWING SIGNATURE

Vendor's Name:	Quinn Evans Architects				
Authorized Signature:	gv,		Date:	19 December 2011	
State of WASHIN	BTON				
County of DISTRAT	OF COLUMBIOAWITE				
Taken, subscribed, and	sworn to before me this 1900	ay of DECEMBER		, 2011	
My Commission expires	10/14/2015	20 /			7
AFFIX SEAL HERE		NOTARY PUBLIC		ma	geeph
			lema	laganh	

Notary Public, District of Columbia My Commission Expires 10/14/2015



