

DEFINITIONS

Architect Services, Engineer Services, Land Surveying Services, Assayer Services, Geologist Services and Landscape Architect Services: Those professional services within the scope of the practice of those services as provided in ARS § 32-101.

Branch Office: A geographically distinct place of business or subsidiary office of a firm that has a key role on the team.

Discipline: Primary technical capabilities of key personnel, as evidenced by academic degree, professional registration, certification, and/or extensive experience.

Firm: Defined in ARS § 32-101(B.19.).

Key Personnel: Individuals who will have major contract responsibilities and/or provide unusual or unique expertise.

SPECIFIC INSTRUCTIONS:

1. Complete this form for each branch office seeking work under this RFQ.
 - a. – e. **Firm (or Branch Office) Name and Address.** Self-explanatory.
 - f. **Year Established.** Enter the year the firm (or branch office, if appropriate) was established under the current name.
 - g. **Ownership.**
 - (g1). *Type.* Enter the type of ownership or legal structure of the firm (sole proprietor, partnership, corporation, joint venture, etc.).
 - (g2). *Small Business Status.* A firm is a small business if the firm has less than 100 employees **or** has gross revenues of \$4 million or less.
 - h.-j. **Point of Contact.** Provide this information for a representative of the firm that the Customer can contact for additional information. The representative must be empowered to speak on contractual and policy matters.
 - k. **Name of Firm.** Enter the name of the firm.
2. **Employees by Discipline.**
 - a. Select disciplines from the List of Disciplines (Function Code) listed on Page 3 of 4 Instructions. For employees that do not qualify for any of the disciplines, select Other. *Note: The intended searchable database indicated in the RFQ will be populated from the Qualifications Form I Excel attachment only.*
 - b. Each person can be counted only twice; once for his/her primary function and once for his/her secondary function. Primary and secondary functions should be indicated by including a "P" or an "S" in column b after the Description Title is given.
 - c-d. If the form is completed for a firm (including all branch offices), enter the number of employees by disciplines in column c. If the form is completed for a branch office, enter the number of employees by discipline in column d and for the firm in column c.
3. **Profile of Firm's Experience and Annual Average Revenue for Last Year.**
 - a. Enter the approximate number of projects the firm (or branch) has done attributable by Profile Code listed on Page 3 of 4 Instructions over the last year.
 - b. Enter the appropriate Profile Codes from Instructions Pages 3 of 4 that represent the type of work the firm (or branch) has done over the last year.
 - c. Using the Revenue Index Number on Page 3 of 6 Form, indicate the approximate revenue the firm has

earned over the last year per Profile Code entered into the table.

4. **Resumes of Key Personnel Proposed for This Contract.** Complete this section for each key person who will participate in this contract.
 - a. Self-explanatory.
 - b. Self-explanatory
 - c. Total years of relevant experience (block c1), and years of relevant experience with current firm, but not necessarily the same branch office (block c2).
 - d. Name, City and State of the firm where the person currently works, which must correspond with one of the firms (or branch office or a firm, if appropriate) listed in Section 1.
 - e. Provide information on the highest relevant academic degree(s) received. Indicate the area(s) of specialization for each degree.
 - f. Provide information on current relevant professional registration(s) and in which State(s) they are current.
 - g. Provide information on any other professional qualifications relating to this contract, such as education, professional registration, publications, organizational memberships, certifications, training, awards, and foreign language capabilities.
 - h. Provide information on no more than five (5) projects in the last year which the person had a significant role that demonstrates the person's capability relevant to her/his proposed role in this contract. These projects do not necessarily have to be any of the projects presented in Section 5 for the project team if the person was not involved in any of those those projects or the person worked on other projects that were more relevant than the team projects in Section 5. Use the check box provided to indicate if the project was performed with any office of the current firm. If any of the professional services or construction projects are not complete, leave Year Completed blank and indicate the status in Brief Description and Specific Role.

5. **Example Projects Which Best Illustrate Firms Qualification for this contract.** Select project where multiple team members worked together, if possible, that demonstrate the team's capability to perform work similar to that required for this contract. Complete one Section 5 for each project. List no more than five (5) projects.
 - a. Title and Locations of project or contract. For an indefinite delivery contract, the location is the geographic scope of the contract.
 - b. Enter the year completed of the professional services (such as planning, engineering study, or design), and/or the year completed if construction. If any of the professional services or the construction projects are not complete, leave Year Completed blank and indicate the status in Brief Description of Project and Relevance to This Contract (block f).
 - c. Project Owner or user, such as a government agency or installation, an institution, a corporation or private individual.
 - d. Provide the original budget or not to exceed dollar amount for the project.
 - e. Provide the Total Cost of the Project. If any of the professional services or construction projects is not complete, indicate the percentage complete and whether this project will be on budget, over or under budget.
 - f. Brief Description: Indicate scope, size, and length of project, principle elements and special features of the project. Discuss the relevance of the example project to this contract.

6. **Additional Information.** Use this section to provide additional information you feel may be necessary to describe your firm's qualifications for this contract.

7. **Annual Average Professional Services Revenues of Firm for Last 3 Years.** Complete this block for the firm or branch office for which this form is completed. In column a, enter an approximate percentage of total work attributable to State, Federal or Municipal Work. In column b, enter an approximate percentage of total work attributable to Non-Government work. Percentages should take into consideration work completed over the last 3 years.

8. **Authorized Representative.** An authorized representative of the firm or branch office must sign and date the completed form. Signing attests that the information provided is current and factual. Provide the name and title of the authorized representative who signed the form.

**RFQ# ADSP014-00003465, Annual Request for Qualifications and Experience
REVISED - Attachment I – General Qualifications**

List of Disciplines (Function Codes) for Question 7

Aeronautical Engineer	Environmental Engineer	Mining Engineer
Agricultural Engineer	Environmental Scientist	Nuclear Engineer
Archeologist	Fire Protection Engineer	Petroleum Engineer
Architect	Geodetic Surveyor	Photogrammetrist
Architectural Engineering	Geographic Information System Specialist	Project Manager
Biologist	Geological Engineer	Sanitary Engineer
CADD Technician	Geologist	Soils Engineer
Chemical Engineer	Hydrographic Surveyor	Structural Engineer
Civil Engineer	Hydraulic Engineer	Technician/Analyst
Construction Manager	Hydrologist	Transportation Engineer
Construction Inspector	Industrial Engineer	Water Resources Engineer
Control Systems Engineer	Landscape Architect	
Cost Engineer/Estimator	Mechanical Engineer	
Ecologist	Metallurgical Engineer	
Electrical Engineer		

List of Experience Categories (Profile Codes for Question 8)

Acoustics, Noise Abatement	Dredging Studies and Design
Aerial Photography; Airborne Data and Imagery Collection and Analysis	Design & Planning Structured Parking Facilities
Activity Centers	Detention Security Systems
Air Pollution Control	Disability / Special Needs
Airports; Navajds; Airport Lighting; Aircraft Fueling	Ecological and Archeological Investigations
Airports; Terminals and Hangars; Freight Handling	Educational Facilities; Classrooms
Agricultural Development; Grain Storage; Farm Mechanization	Electrical Studies and Design
Animal Facilities	Electronics
Anti-Terrorism/Force Protection	Elevators; Escalators; People-Movers
Area Master Planning	Energy / Water Auditing Savings
Auditoriums and Theaters	Energy Conservation; New Energy Sources
Automation; Controls; Instrumentation	Environmental Impact Studies, Assessments or Statements
Barracks; Dormitories	Fallout Shelters; Blast-Resistant Design
Bridge Design: Bridges	Fire Protection
Cartography	Fisheries; Fish Ladders
Cemeteries (<i>Planning and Relocation</i>)	Forensic Engineering
Chemical Processing and Storage	Garages; Vehicles Maintenance Facilities; Parking
Child Care/Development Facilities	Gas Systems (<i>Propane; Natural, Etc.</i>)
Codes; Standards; Ordinances	Geodetic Surveying: Ground and Airborne
Cold Storage; Refrigeration and Fast Freeze	Heating; Ventilating; Air Conditioning
Commercial Building (<i>Low Rise</i>); Shopping Centers	Highways; Streets; Airfield Paving; Parking Lots
Community Facilities	Historical Preservation
Communications Systems; TV; Microwave	Hospital and Medical Facilities
Computer Facilities	Hotels; Motels
Conservation and Resource Management	<i>Housing (Residential, Multi-Family; Apartments; Condominiums)</i>
Construction Management	Hotels; Motels
Construction Surveying	Hydraulics and Pneumatics
Corrosion Control; Cathodic Protection Electrolysis	Hydrographic Surveying
Cost Estimating; Cost Engineering and Analysis; Parametric Costing; Forecasting	Industrial Buildings; Manufacturing Plants
Cryogenic Facilities	Industrial Processes; Quality Control
Construction Materials Testing	Industrial Waste Treatment
Dams (<i>Concrete; Arch</i>)	Intelligent Transportation Systems
Dams (<i>Earth; Rock</i>); Dikes; Levees	Infrastructure
Desalinization (<i>Process and Facilities</i>)	Irrigation; Drainage
Design-Build - Preparation of Requests for Proposals	Judicial and Courtroom Facilities
Digital Elevation and Terrain Model Development	Laboratories; Medical Research Facilities
Digital Orthophotography	Land Surveying
Dining Halls; Clubs; Restaurants	Landscape Architecture
	Libraries; Museums; Galleries

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Lighting (*Interior; Display; Theater, Etc.*)
Lighting (*Exteriors; Streets; Memorials; Athletic Fields, Etc.*)
Labs - General
Labs – Research – Dry
Labs – Research – Wet
LEED Accredited A/E
LEED Independent 3rd Party Building Commissioning
Mapping Location/Addressing Systems
Materials Handling Systems; Conveyors; Sorters
Metallurgy
Materials Testing
Measurement / Verification / Conservation Water Consumption Savings
Mining and Mineralogy
Medical Related
Modular Systems Design; Fabricated Structures or Components
Mold Investigation
Museums
Nuclear Facilities; Nuclear Shielding
Office Buildings; Industrial Parks
Outdoor Recreation
Petroleum and Fuel (*Storage and Distribution*)
Photogrammetry
Pipelines (*Cross-Country - Liquid and Gas*)
Phase I Environmental
Prisons & Correctional Facilities
Plumbing and Piping Design
Prisons and Correctional Facilities
Product, Machine Equipment Design Pneumatic Structures, Air-Support Buildings Power Generation, Transmission, Distribution Public Safety Facilities
Radar; Sonar; Radio and Radar Telescopes
Radio Frequency Systems and Shielding's
Railroad; Rapid Transit
Recreation Facilities (*Parks, Marinas, Etc.*)
Refrigeration Plants/Systems
Rehabilitation (*Buildings; Structures; Facilities*)
Research Facilities
Resources Recovery; Recycling
Roof Infrared Imaging to Identify Water Leaks

Roofing
Safety Engineering; Accident Studies; OSHA Studies
Security Systems; Intruder and Smoke Detection
Seismic Designs and Studies
Sewage Collection, Treatment and Disposal
Soils and Geologic Studies; Foundations
Solar Energy Utilization
Solid Wastes; Incineration; Landfill
Special Environments; Clean Rooms, Etc.
Structural Design; Special Structures
Surveying; Platting; Mapping; Flood Plain Studies
Sustainable Design
Swimming Pools
Storm Water Handling and Facilities
Specifications Writing
Toxicology
Testing and Inspection Services
Traffic and Transportation Engineering
Topographic Surveying and Mapping
Towers (*Self-Supporting and Guyed Systems*)
Tunnels and Subways
Traffic Studies
Transportation
Urban renewals; Community Development
Utilities (*Gas and Steam*)
Value Analysis; Life-Cycle Costing
Warehouse and Depots
Water Resources; Hydrology; Ground Water
Water Supply; Treatment and Distribution
Wind Tunnels; Research/Testing Facilities Design
Waste Water Treatment Facility
Water Well Rehabilitation; Water Well Work
Zoning; Land Use Studies

(If a firm has branch offices, complete for each specific branch office seeking work.)

1. **REVISED ADSPO13-00003465: Annual Request for Qualifications**

a.	FIRM (OR BRANCH OFFICE) NAME:	Engineered With Layton, PLC
b.	FIRM (OR BRANCH OFFICE) STREET:	37335 W. Vera Cruz Drive
c.	FIRM (OR BRANCH OFFICE) CITY:	Maricopa
d.	FIRM (OR BRANCH OFFICE) STATE:	Arizona
e.	FIRM (OR BRANCH OFFICE) ZIP CODE:	85138
f.	YEAR ESTABLISHED:	2007
(g1).	OWNERSHIP - TYPE:	Professional Limited Liability Company
(g2)	OWNERSHIP - SMALL BUSINESS STATUS:	CVE Certified Service-Disabled Veteran Owned Small Business (SDVOSB); Veteran Owned Small Business (VOSB); Small Business (SB)
h.	POINT OF CONTACT NAME AND TITLE:	N. Emery Layton, P.E.
i.	POINT OF CONTACT TELEPHONE NUMBER:	480-244-3355
j.	POINT OF CONTACT E-MAIL ADDRESS:	emery@engwlayton.com
k.	NAME OF FIRM (If block 1a is a branch office):	

2. EMPLOYEES BY DISCIPLINE

a. Discipline Title	b. Function: Primary (P) or Secondary (S)	c. No. of Employees - Firm	d. No. of Employees - Branch
Civil Engineer	P	1	
Environmental Engineer	P	1	
Sanitary Engineer	S	1	
Water Resources Engineer	S	1	
Electrical Engineer	P	2	
Project Manager	S	1	
CADD Technician	P	1	
Construction Manager	S	1	
Hydraulic Engineer	S	1	
Total		5	

*Please note that EWL also offers the following in-house services:

- Construction Inspector
- Cost Engineer/Estimator
- Technician/Analyst

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REVISED - Attachment I – General Qualifications**

3. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST YEAR

a. Approximate No. of Projects	b. Experience	c. Revenue Index Number (see below)
3	Water Supply; Treatment and Distribution	1
1	Storm Water Handling and Facilities	1
2	Water Resources; Hydrology; Ground Water	1
2	Waste Water Treatment Facility	1
1	Water Well Rehabilitation; Water Well Work	1
1	Energy / Water Auditing Savings	1
2	Measurement / Verification / Conservation Water Consumption Savings	1
3	Area Master Planning	1
1	LEED Accredited A/E	1
3	Sustainable Design	1
2	Hospital and Medical Facilities	2
2	Electrical Studies and Design	2
2	Lighting (<i>Interior; Display; Theater, Etc.</i>)	2
2	Environmental Planning	1
1	Irrigation/Drainage	1

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

- | | |
|---|---|
| 1. Less than \$100,000 | 6. \$2 million to less than \$5 million |
| 2. \$100,000 to less than \$250,000 | 7. \$5 million to less than \$10 million |
| 3. \$250,000 to less than \$500,000 | 8. \$10 million to less than \$25 million |
| 4. \$500,000 to less than \$1 million | 9. \$25 million to less than \$50 million |
| 5. \$1 million to less than \$2 million | 10. \$50 million or greater |

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REVISED - Attachment I – General Qualifications**

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME N. Emery Layton, PE, MLT		b. ROLE IN THIS CONTRACT Principal-in-Charge / Civil, Environmental & Sanitary Engineer		c. YEARS EXPERIENCE	
		1. TOTAL 12	2. WITH CURRENT FIRM 6		
d. FIRM NAME AND LOCATION (City and State) Engineered With Layton, Maricopa, Arizona					
e. EDUCATION (DEGREE AND SPECIALIZATION) B.S. Environmental Engineering / Louisiana State University			f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Licensed Professional Engineer (Environmental), Arizona #45690		
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Mr. Layton has more than 12 years of experience as a regulatory, consulting and utility engineer. His consulting experience includes design, value engineering design, construction management, on-site engineering, master planning, modeling and permitting of various commercial, industrial and residential projects. He is experienced in the planning, modeling, design and construction oversight of public and private water systems, wastewater collection and treatment plant processes, recharge systems and reuse infrastructure as well as other general site civil projects and various environmental permitting projects.					
H. RELEVANT PROJECTS					
1)	(1) TITLE AND LOCATION (City and State) Mayer Arsenic Treatment System & New Storage Tank, Mayer Domestic Water Improvement District, Mayer, AZ		(2) Year Completed		
			Professional Services Current	Construction (if applicable) Current	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE District engineer/engineer-of-record performing engineering for design and permitting of the Arsenic Treatment systems selected during the masterplanning. EWL is designing new 200,000-gal welded steel storage tank on concrete ring foundation. EWL will also provide construction bidding services. EWL will manage project during construction. (\$40,790)		<input checked="" type="checkbox"/> Check if project performed with current firm		
2)	(1) TITLE AND LOCATION (City and State) Mayer Waterline Replacement Projects, Mayer Domestic Water Improvement District, Mayer, AZ		(2) Year Completed		
			Professional Services Current	Construction (if applicable) Current	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE District engineer/engineer-of-record performing engineering for waterline replacement projects. EWL contracted to engineer Phases 2 & 3 of 3-phase project. EWL has performed design, permitting and construction services for approximately 2,400 lf of waterline replacement along Main St. and recently awarded Jefferson St. project encompassing 5,200 lf of new waterline for the district. (\$19,400-Main St.; \$34,535-Jefferson St.)		<input checked="" type="checkbox"/> Check if project performed with current firm		
3)	(1) TITLE AND LOCATION (City and State) Mayer Arsenic Masterplan, Mayer Domestic Water Improvement District, Mayer, AZ		(2) Year Completed		
			Professional Services 2012	Construction (if applicable) Current	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Principal & district engineer and engineer-of-record performing study on wells within Big Bug Creek Watershed, with several wells removed due to arsenic levels. Performed an Arsenic Masterplan to provide District with information needed to add 2 discontinued wells back online and meet ADEQ and EPA regulations. Provided multiple treatment options with associated costs for each alternative and made recommendations. (\$5,075)		<input checked="" type="checkbox"/> Check if project performed with current firm		
4)	(1) TITLE AND LOCATION (City and State) VA Medical Center Rehab/Prosthetics & Ortho/Neuro/Holistic Medicine Addition, Building B.01, Salt Lake City, UT		(2) Year Completed		
			Professional Services Current	Construction (if applicable) 2014 (expected)	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Principal-in-Charge managing the entire design team producing complete construction documents to build a new prosthetics/rehab expansion to main rehab wing of Building B1. 23,443 sq. ft. (expansion) with for ortho/neuro clinics to accommodate increased demands on prosthetics and special ortho/neuro/holistic clinics. \$9.3 M (construction contract)		<input checked="" type="checkbox"/> Check if project performed with current firm		
5)	(1) TITLE AND LOCATION (City and State) VA Medical Center Lock Out Tag Out (LOTO) Study, Report, and Training, Salt Lake City, UT		(2) Year Completed		
			Professional Services Current	Construction (if applicable) N/A	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Principal-in-Charge managing the entire design team's study of the VAMC Campus Lock Out Tag Out (LOTO) Procedures. Following the study a report will be provided on how to better comply with OSHA code requirements and VA standards. General LOTO procedures are being rewritten and developed for individual units for electrical, mechanical, and medical equipment. Includes study, report, training of VA personnel. \$100,000		<input checked="" type="checkbox"/> Check if project performed with current firm		

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REVISED - Attachment I – General Qualifications**

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME Truman Henard, Jr., PhD, PE, MLE, LEED AP	b. ROLE IN THIS CONTRACT Project Manager/Principal Electrical Engineer	c. YEARS EXPERIENCE	
		2. TOTAL 32	2. WITH CURRENT FIRM 1
d. FIRM NAME AND LOCATION (City and State) Engineered With Layton, Maricopa, Arizona			
e. EDUCATION (DEGREE AND SPECIALIZATION) Ph. D Electrical Engineering / LaSalle University MS Electrical Engineering / LaSalle University BS Electrical Engineering / Purdue University		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Licensed Professional Engineer (Electrical) in 19 states, incl: Arizona #21160 LEED 2.2 Accredited Professional (AP) Certified Master Electrician & EPA Certified—Asbestos/Lead Inspector/Management Planner Contractor; Supervisor & Project Abatement Designer under Federal EPA Guidelines	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Dr. Henard has spent 30+ years in the design and construction of complex electrical/mechanical systems. He excels in the management of large discrete and open-end on-call contracts. His expertise focuses on cost/energy efficient design and energy management control systems for large commercial/educational buildings as well as project management. He has an excellent ability to evaluate field related problems, analyze options and determine appropriate solutions quickly.			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) VA Medical Center Rehab/Prosthetics & Ortho/Neuro/Holistic Medicine Addition, Building B.01, Salt Lake City, UT	(2) Year Completed	
		Professional Services Current	Construction (if applicable) 2014 (expected)
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Principal Electrical Engineer/Project Manager of the design team producing construction documents to build a new prosthetics/rehab expansion to main rehab wing of Building B1. 23,443 sq. ft. (expansion) with for ortho/neuro clinics to accommodate increased demands on prosthetics and special ortho/neuro/holistic clinics. \$9.3 M (construction contract)			
2)	(1) TITLE AND LOCATION (City and State) VA Medical Center Lock Out Tag Out (LOTO) Study, Report, and Training, Salt Lake City, UT	(2) Year Completed	
		Professional Services Current	Construction (if applicable) N/A
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Principal Electrical Engineer/Project Manager managing the design team's study of the VAMC Campus Lock Out Tag Out (LOTO) Procedures. Following the study a report will be provided on how to better comply with OSHA code requirements and VA standards. General LOTO procedures are being rewritten and developed for individual units for electrical, mechanical, and medical equipment. Includes study, report, training of VA personnel. \$100,000			
3)	(1) TITLE AND LOCATION (City and State) VA Medical Center Electrical & Mechanical On-call IDIQs, Salt Lake City, UT	(2) Year Completed	
		Professional Services 2008-Present	Construction (if applicable) Current
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Principal-in-charge (while with another firm) holding the five-year on-call contract with a \$5 million cap per year. Dr. Henard was in charge of the design of 100+ separate projects under these contracts. Projects include studies/upgrades to campus & involve high voltage/medium voltage distribution, emergency power generation and essential power systems, storm drain/parking lot modifications and renovations including laboratory, CT and fluoroscopy spaces. Size/Costs vary depending on projects.			
4)	(1) TITLE AND LOCATION (City and State) Sheridan VA Medical Center Boiler Replacement, Sheridan, WY	(2) Year Completed	
		Professional Services 2012	Construction (if applicable) 2012
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Principal-in-charge of MEP engineering/principal electrical engineer for replacement of an outdated coal-fired boiler plant. New plant is designed with 2 new, equal sized coal fired boilers & 1 natural gas boiler, allowing coal boilers to run at 58% during peak demand & natural gas boiler available to supplement 1 of the coal boilers. \$9,844,097 (total cost)			
5)	(1) TITLE AND LOCATION (City and State) ASU Reliable Power Study, Gap Analysis, Master Plan & Phase 1 Priority Upgrades, Tempe, AZ	(2) Year Completed	
		Professional Services 2012	Construction (if applicable) Current
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Principal Electrical Engineer/Project Manager for this \$587,869.55 project affecting the entire campus (including some 100 on- and off-campus buildings. Master Plan complies with ASU's standard for reliability that establishes a campus standard of uptime requirements for equipment and facilities, based on an exhaustive campus-wide power reliability study led by Dr. Henard's team that documented and evaluated major stakeholder needs.			

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REVISED - Attachment I – General Qualifications**

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME Mark R. Slater, EIT		b. ROLE IN THIS CONTRACT Civil Engineering EIT-Engineer-in-Training		c. YEARS EXPERIENCE	
		3. TOTAL 2	2. WITH CURRENT FIRM 1		
d. FIRM NAME AND LOCATION (City and State) Engineered With Layton, Maricopa, Arizona					
e. EDUCATION (DEGREE AND SPECIALIZATION) B.S. Civil Engineering / The University of Arizona *Minor in Mathematics			f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Passed FE Exam October 2012—State of Arizona BOTR Certificate #11717		
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Mr. Slater is a graduate civil engineering EIT with experience using surveying equipment such as Total Station, Digital Theodolite, AutoCAD, AutoCAD Civil 3D, RISA 3D, EPAnet, HY-8, PC Hydro, HCS+, HCS2000. He has 2 years of experience as a regulatory and consulting engineer providing hydraulic modeling & analysis, design, grading & drainage, & construction management. He is experienced in planning, modeling, analysis, & construction oversight of public water & wastewater systems. He is certified as an Engineer-In-Training in the state of Arizona. Member: UA-ITE American Society of Civil Engineers/Chapter Treasurer.					

RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) Hydraulic Modeling & Analysis of Pima County Regional Wastewater Reclamation Departments Lift Stations, Pima County, AZ	(2) Year Completed	
		Professional Services 2013	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Civil engineering intern. Conducted modeling and analysis of all 20+ of Pima County Regional Wastewater Reclamation Departments (PCRWRD) lift stations.		
2)	(1) TITLE AND LOCATION (City and State) Pima County Regional Wastewater Reclamation Department Engineering Design 2012 Standards & Specifications, Pima County, AZ	(2) Year Completed	
		Professional Services 2012	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Civil engineering intern for this project that drafted and edited PCRWRD's Engineering Design Standards 2012 & Standard Specifications and Details for Construction 2012.		
3)	(1) TITLE AND LOCATION (City and State) 6" Waterline Replacement for Pima County Regional Wastewater Reclamation Department (PCRWRD), Mayer, AZ	(2) Year Completed	
		Professional Services 2012	Construction (if applicable) 2013
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Civil engineering intern for a replacement of a 6" Waterline in the Town of Mayer, Arizona, totaling approximately 4600 LF		
4)	(1) TITLE AND LOCATION (City and State) VA Medical Center Rehab/Prosthetics & Ortho/Neuro/Holistic Medicine Addition, Building B.01, Salt Lake City, UT	(2) Year Completed	
		Professional Services Current	Construction (if applicable) 2014 (expected)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project EIT in support of EWL's responsibilities in managing the entire design team producing complete construction documents to build a new prosthetics/rehab expansion to main rehab wing of Building B1. 23,443 sq. ft. (expansion) with for ortho/neuro clinics to accommodate increased demands on prosthetics and special ortho/neuro/holistic clinics. \$9.3		
5)	(1) TITLE AND LOCATION (City and State) VA Medical Center Lock Out Tag Out (LOTO) Study, Report, and Training, Salt Lake City, UT	(2) Year Completed	
		Professional Services Current	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project EIT in support of EWL's responsibilities in managing the entire design team's study of the VAMC Campus Lock Out Tag Out (LOTO) Procedures. Following the study a report will be provided on how to better comply with OSHA code requirements and VA standards. General LOTO procedures are being rewritten and developed for individual units for electrical, mechanical, and medical equipment. Includes study, report, training of VA personnel. \$100,000		

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a. NAME Will N. Felt, P.E., LEED AP		b. ROLE IN THIS CONTRACT Electrical Project Manager		c. YEARS EXPERIENCE	
				4. TOTAL 8	2. WITH CURRENT FIRM 8
d. FIRM NAME AND LOCATION (City and State) Engineered With Layton, Maricopa, Arizona					
e. EDUCATION (DEGREE AND SPECIALIZATION) B.S. / Electrical Engineering / University of Utah / Pursuing M.S. degree in Electrical Engineering			f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Licensed Professional Engineer (P.E) in Utah #7690241 and California #18822 / 2009 LEED 2.1 Accredited Professional / Nov. 2006		
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Mr. Felt, P.E., is a degreed electrical project manager and Leadership in Energy and Environmental Design Accredited Professional (LEED AP) with 8 years of electrical engineering design experience. He specializes in electrical distribution modeling using SKM power analysis software (SKM Power*Tools). He is frequently called upon to provide fault current studies and arc flash analyses. He is working alongside EWL's N. Emery Layton and Truman Henard on current EWL projects. He and Truman Henard have 6 years of experience working on projects together while employed by another firm.					
RELEVANT PROJECTS					
1)	(1) TITLE AND LOCATION (City and State) VA Medical Center Rehab/Prosthetics & Ortho/Neuro/Holistic Medicine Addition, Building B.01, Salt Lake City, UT		(2) Year Completed		
			Professional Services Current	Construction (if applicable) 2014 (expected)	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Electrical Engineer in support of EWL's responsibilities in managing the entire design team producing complete construction documents to build a new prosthetics/rehab expansion to the main rehab wing of Building B1. 23,443 sq. ft. (expansion) for ortho/neuro/holistic clinics. \$9.3 million (construction contract).					
2)	(1) TITLE AND LOCATION (City and State) VA Medical Center Lock Out Tag Out (LOTO) Study, Report, and Training, Salt Lake City, UT		(2) Year Completed		
			Professional Services Current	Construction (if applicable) N/A	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project electrical engineer supporting EWL's responsibilities in managing the design team's study of the VAMC Campus Lock Out Tag Out (LOTO) Procedures. Following the study a report will be provided on how to better comply with OSHA code requirements and VA standards. General LOTO procedures are being rewritten and developed for individual units for electrical, mechanical, and medical equipment. Includes study, report, training of VA personnel. \$100,000					
3)	(1) TITLE AND LOCATION (City and State) VA Medical Center Metasys® Controls Upgrade for Alternate Energy Master Plan, Phases II and III, Salt Lake City, UT		(2) Year Completed		
			Professional Services 2011	Construction (if applicable) 2012	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Project electrical engineer for phases II & III of this three-phase project to increase energy efficiency of the Salt Lake City Veterans Affairs Medical Center through improvements to the building automation system (BAS). Mr. Felt managed the coordination between mechanical and lighting designs and the coordination between field surveys and survey reports. Phase II—Building 1 BAS upgrades, Phase III—Building 14 upgrades (\$675,000).					
4)	(1) TITLE AND LOCATION (City and State) VA Medical Center Therapy Pool Solar Heating System, Building B.08, Salt Lake City, UT		(2) Year Completed		
			Professional Services 2009	Construction (if applicable) 2010	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Project electrical engineer for this \$360,000 project, which included design of solar heating system to heat 60-foot by 30-foot therapy pool in Building B.08. Project involves installation of 24 vacuum tube solar panels on the pool roof. Worked closely with controls contractor to design a Web-based, realtime monitoring system that provides exact monitoring (in-line, temperature and flow rates as well as solar energy production rates, available solar energy and energy utilized). Controls were interfaced with VA's DDC system.					
5)	(1) TITLE AND LOCATION (City and State) VA Medical Center #2 Boiler Failure Analysis and Replacement, Salt Lake City, UT		(2) Year Completed		
			Professional Services 2011	Construction (if applicable) 2011	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Project electrical engineer to design electrical power distribution and lighting systems in addition to assisting with the coordination between other specialties such as mechanical and fire protection engineering for this replacement of boiler #2 and upgrades to the campus central boiler plant. Estimated construction cost: \$2.5 million. The boiler replacement project followed a failure analysis of the #2 boiler with recommendations.					

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4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

a. NAME Paul S. Southern		b. ROLE IN THIS CONTRACT CAD/BIM Manager/Operator		c. YEARS EXPERIENCE	
				5. TOTAL 15	2. WITH CURRENT FIRM 1
d. FIRM NAME AND LOCATION (City and State) Engineered With Layton, Maricopa, Arizona					
e. EDUCATION (DEGREE AND SPECIALIZATION) Applied Sciences Degree / Computer Aided Drafting and Design Universal Technical Institute, Phoenix, AZ			f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Autodesk® Revit® Building Fundamentals / Revit Bldg 9.1 Autodesk® Revit® Building Level 2 / Revit Building 9.1 Autodesk® Revit® Systems Essentials / Revit Systems 2 Autodesk Building Systems 2007 / Projects & Tools, MEP		
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Mr. Southern is a BIM modeler with 15+ years of experience in drafting for electrical engineering on a variety of facilities including educational and on-call IDIQ projects. He is trained in and operates Autodesk® Revit® MEP 2013 3D Building Information Modeling (BIM) software; the latest versions of computer aided drafting and design software including Autodesk® AutoCAD® (versions up to 2013) and Autodesk® AutoCAD® MEP 2013. Since 2007 he has worked closely with EWL's Dr. Henard, P.E., to perform extended construction administration services/construction observation for dozens of projects at the VA Medical Center in Salt Lake City through multiple renewed on-call IDIQ contracts for engineering services. Mr. Southern's involvement includes field investigation and verification and documenting processes and results for the owner.					
RELEVANT PROJECTS					
1)	(1) TITLE AND LOCATION (City and State) ASU Reliable Power Study, Gap Analysis, Master Plan & Phase 1 Priority Upgrades, Tempe, AZ		(2) Year Completed		
			Professional Services 2012	Construction (if applicable) Current	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm BIM Modeler/Study Support for this \$587,869.55 project affecting the entire campus (including some 100 on- and off-campus buildings. Master Plan complies with ASU's standard for reliability that establishes a campus standard of uptime requirements for equipment and facilities, based on an exhaustive campus-wide power reliability study led by EWL's Dr. Henard and his team (including Mr. Southern) that documented and evaluated major stakeholder needs.					
2)	(1) TITLE AND LOCATION (City and State) VA Medical Center, Upgrade Essential Emergency Electrical Distribution System, Building B.14, Salt Lake City, UT		(2) Year Completed		
			Professional Services 2012	Construction (if applicable) Current	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Lead BIM modeler for this \$1.2 M (construction budget) project to provide a completely new emergency distribution system for approximately 600,000 sq. ft. of space at the Medical Center to ensure segregation of the critical, life safety and equipment emergency distribution systems.					
3)	(1) TITLE AND LOCATION (City and State) VA Medical Center MRI Expansion Design & Site Preparation, Building B.01, Salt Lake City, UT		(2) Year Completed		
			Professional Services	Construction (if applicable)	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Lead BIM modeler for this \$300,000 (approximate), 5,000 sq. ft. expansion to Building B.01 to accommodate a new Siemens Magnetom Skyra 3T MRI scanner and incorporate the relocation of the existing CT scanner to the new space.					
4)	(1) TITLE AND LOCATION (City and State) VA Medical Center Rehab/Prosthetics & Ortho/Neuro/Holistic Medicine Addition, Building B.01, Salt Lake City, UT		(2) Year Completed		
			Professional Services Current	Construction (if applicable) 2014 (expected)	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm BIM Modeler in support of EWL's responsibilities in managing the entire design team producing complete construction documents to build a new prosthetics/rehab expansion to main rehab wing of Building B1. 23,443 sq. ft. (expansion) with for ortho/neuro clinics to accommodate increased demands on prosthetics and special ortho/neuro/holistic clinics. \$9.3					
5)	(1) TITLE AND LOCATION (City and State) VA Medical Center Lock Out Tag Out (LOTO) Study, Report, and Training, Salt Lake City, UT		(2) Year Completed		
			Professional Services Current	Construction (if applicable) N/A	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Engineering support/Lead BIM Modeler assisting in EWL's responsibilities to manage the team's study of the VAMC Campus Lock Out Tag Out (LOTO) Procedures. Following the study a report will be provided on how to better comply with OSHA code requirements and VA standards. General LOTO procedures are being rewritten and developed for individual units for electrical, mechanical, and medical equipment. Includes study, report, training of VA personnel. \$100,000					

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5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present no more than five (5) projects. Complete one Section 5 for each project.)

a. TITLE AND LOCATION <i>(City and State)</i> Mayer Arsenic Masterplan, Mayer Domestic Water Improvement District, Mayer, AZ	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES 2012	CONSTRUCTION <i>(If applicable)</i>

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER Mayer Domestic Water Improvement District (DWID)	d. DOLLAR AMOUNT OF PROJECT \$5,075	e. TOTAL COST OF PROJECT \$5,075
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f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(include scope, size, and length of project)*

EWL's N. Emery Layton was hired by the Mayer Domestic Water Improvement District (DWID) to perform a study on wells within the District Big Bug Creek Watershed. Several wells have been removed from service as required by Arizona Department of Environmental Quality. The wells tested higher than the Arsenic MCL stipulated by the Clean Water Act. The District was attempting to blend non-compliant wells with compliant wells but without a proper blending system test results would at times show non-compliance (greater than 10.0-ppb) for Arsenic.

Loss of the Cliff and Gate wells from the active well inventory caused reduced production flows for the District and caused them to enact conservation rates on their customers during summer peak demand periods. EWL performed an Arsenic Materplan to provide the District with information on how to proceed with a project to add these 2 wells back into the system and meet ADEQ and EPA regulations. The purpose of the study was to demonstrate multiple options for mitigation of the Arsenic (wellhead treatment, centralized treatment, blending with treatment, and treatment without blending), coordinate with manufacturing representatives to obtain budgetary pricing and provide a summary report with engineering recommendations to proceed to permitting and construction.

EWL provided our client with multiple treatment options, visited installation locations of vendor products of similar size and scope, provided feedback from operational staff running the systems, provided costs of each alternative, provided pro's and con's of each type of system and identified an option selected by the District. The system selected was a low-capital cost wellhead treatment system that was easy to install by the District's current operational staff which saved thousands of dollars in contractor installation costs, the system is easy to operate, has a low cost to maintain and has a negligible safety impact for operational staff who will be responsible for periodic media change-outs. The District followed up within 2 months of delivery of the Arsenic Masterplan Report by awarding EWL a contract for design and permitting of the Arsenic Treatment System and additional infrastructure. The total cost of the masterplan portion of the project is \$5,075, for which professional services were completed in 2012. Additional design/construction projects have originated from the masterplan and construction is ongoing.

EWL's Role: District Engineer, Engineer of Record

Relevance: existing system investigation & evaluation, water quality masterplanning, treatment planning, small system concerns, regulatory compliance, etc.

Owner: Mayer Domestic Water Improvement District (DWID)

Reference Name: Mr. Casey Boone, Operations Manager
Contact Information: 928-632-4113 (office) / 928-713-9799 (mobile)
mayerwaterdistrict@gmail.com

Reference Name: Ms. Pat Champion, Chairwoman
Contact Information: 602-920-8605 (mobile)
cchhaammpp@aol.com

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5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT
(Present no more than five (5) projects. Complete one Section 5 for each project.)

a. TITLE AND LOCATION <i>(City and State)</i>		b. YEAR COMPLETED	
Mayer Waterline Replacement Projects, Mayer Domestic Water Improvement District, Mayer, AZ		PROFESSIONAL SERVICES 2013	CONSTRUCTION <i>(If applicable)</i>

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER	d. DOLLAR AMOUNT OF PROJECT	e. TOTAL COST OF PROJECT
Mayer Domestic Water Improvement District (DWID)	\$19,400 for Main Street \$34,535 for Jefferson Street	\$19,400 for Main Street \$34,535 for Jefferson Street

f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)
EWL's N. Emery Layton was hired by Mayer Domestic Water Improvement District (DWID) to perform engineering services for several waterline replacement projects in the District service area. The District is on their 3rd phase of replacement projects. The 1st phase was engineered by others. The District hired EWL to replace their previous engineering consultant. EWL has been working for Mayer DWID on the replacement projects since early 2012.

To date EWL has performed design, permitting and construction services for approximately 2400-lf of waterline replacement along Main Street. EWL was recently awarded (June 2013) the Jefferson Street project which encompasses waterline replacements on 6 additional streets. The project is in the preliminary design stage and encompasses about 5200-lf of new waterlines for the District. These waterline replacement projects are necessary to ensure the reliability and safety of the system by provide new larger diameter mains which increase pressure and flow capabilities within the service area and replace aging infrastructure that is prone to leaks and habitual line breaks.

EWL provided our client with preliminary design plans, verified existing utilities within the proposed alignment, coordinated with the other utility providers, performed final construction plans, permitting services, construction management services, ROW permitting services, coordination with Yavapai County Environmental Services (YCESD) and Public Works Departments and additional oversight and troubleshooting during construction since the installation work is being self-performed, final inspection, review of asbuilts, preparation of record drawings, oversight during testing and commissioning and is almost ready to provide final permitting submittals. The testing work is just completing and EWL is currently preparing the final submittals to YCESD so the District can obtain their operational permits. (\$19,400 for Main St., \$34,535 for Jefferson St.). 90% of professional services completed in 2013 with construction on-going for the Jefferson Street project.

- EWL's Role: District Engineer, Engineer of Record
- Relevance: Project cradle to grave activities from design through startup, existing system investigation and evaluation, project management, agency permitting services, sub-consultant oversight and coordination, construction activity support to educate and enforce typical construction methods for work being self-performed and County Agency coordination.
- Owner: Mayer Domestic Water Improvement District (DWID)
- Reference Name: Mr. Casey Boone, Operations Manager
Contact Information: 928-632-4113 (office) / 928-713-9799 (mobile)
mayerwaterdistrict@gmail.com
- Reference Name: Ms. Pat Champion, Chairwoman
Contact Information: 602-920-8605 (mobile)
cchhaammpp@aol.com

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5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT		
<i>(Present no more than five (5) projects. Complete one Section 5 for each project.)</i>		
a. TITLE AND LOCATION <i>(City and State)</i>	b. YEAR COMPLETED	
Arizona State University Reliable Power Study, Gap Analysis, and Master Plan & Phase 1 Priority Upgrades, Tempe, AZ	PROFESSIONAL SERVICES	CONSTRUCTION <i>(If applicable)</i>
	2011 (Study) 2012 (Upgrades)	N/A (Study) Current (Upgrades)

23. PROJECT OWNER'S INFORMATION		
c. PROJECT OWNER	d. DOLLAR AMOUNT OF PROJECT	e. TOTAL COST OF PROJECT
State of Arizona/Arizona State University	\$587,869.55 (Study & Master Plan) \$202, 260 (Phase I Upgrades; est.)	\$587,869.55 (Study & Master Plan) \$202, 260 (Phase I Upgrades; est.)

f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)
EWL's Dr. Truman Henard and Mr. Paul Southern, while with another firm, worked closely together on these projects for ASU. Dr. Henard served as the Principal Electrical Engineer/Project Manager and Mr. Southern served as the BIM Modeler/Engineering Support for both the Study/Master Plan and Phase 1 Upgrades portions of these projects.

Study & Master Plan

As Principal Electrical Engineer/Project Manager for the prime A/E, Dr. Henard prepared a master plan complying with the university's standard for reliability that establishes a campus standard of uptime requirements for equipment and facilities. The ASU standard for reliability (ASR) is based on an exhaustive campus-wide power reliability study conducted by Spectrum that documented and evaluated major stakeholder needs, especially those related to research, and existing power conditions.

Based upon the data that was acquired, the existing distribution, generation and utility systems were analyzed for gaps which pose risk of outage. Using SKM software, a load flow study, voltage drop study, and an ARC flash study were performed to determine noncompliant components in accordance with the ASR. A failure modes and effects analysis was performed and included a survey of cooling infrastructure, access security, and other related gaps that increase the risk of downtime. A study of the existing SF6 switches was included and a report was issued detailing these results.

Using the SKM software for the existing power infrastructure, a master plan document was prepared with proposed modifications to the infrastructure including schedule and cost to meet the requirements of the ASR. The final master plan document presented future proposed upgrades to campus infrastructure with associated costs and schedules.

Priority 1 Upgrades

Following the master plan that showed compliance with the university's standard for reliability, and that establishes a campus standard of uptime requirements for equipment and facilities, this is the first phase of upgrades that were recommended from the exhaustive campus-wide power reliability study that documented and evaluated major stakeholder needs, especially those related to research, and existing power conditions.

Employed by the prime A/E at the time of design, Dr. Henard and Mr. Southern provided electrical engineering design and/or support and Dr. Henard provided project management for mechanical engineering.

Role of EWL Team Members: Principal Electrical Engineer/Project Manager and BIM Modeling/Engineering Support

Relevance: Project cradle-to-grave study, analysis, masterplanning and engineering support followed by engineering design/project management/construction observation of upgrades.

Owner: State of Arizona/Arizona State University

Reference Name: Mr. Mohammad Madjidi, ASU (Study & Master Plan)
Contact Information: 480-965-1809

Reference Name: Mr. Tim Keneipp, ASU (Priority 1 Upgrades)
Contact Information: 480-965-1805

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5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT		
(Present no more than five (5) projects. Complete one Section 5 for each project.)		
a. TITLE AND LOCATION (City and State)	b. YEAR COMPLETED	
George E. Wahlen Department of Veterans Affairs Medical Center Rehab/Prosthetics and Ortho/Neuro/Holistic Medicine Addition, Building B.01 Salt Lake City UT	PROFESSIONAL SERVICES In Design	CONSTRUCTION (If applicable) 2014 (expected)
23. PROJECT OWNER'S INFORMATION		
c. PROJECT OWNER U.S. Department of Veterans Affairs George E. Wahlen Veterans Affairs Medical Center	d. DOLLAR AMOUNT OF PROJECT \$9,300,000 (budget)	e. TOTAL COST OF PROJECT \$9,300,000 (budget)
f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)		

Engineered With Layton (EWL) was recently awarded this budgeted \$9.3 million dollar construction contract as the PRIME A/E to manage the entire design team to produce complete construction documents to build a new prosthetics/rehab expansion to the main rehab wing of Building B1. The expansion totals 23,443 sq. ft. with provisions for ortho/neuro clinics to accommodate increased demands on prosthetics and special ortho/neuro/holistic clinics. The expansion will be partially constructed on a currently vacant parcel of the Salt Lake VAMC and will require an existing utility corridor to be removed and relocated along with a major second floor addition. The EWL team is addressing the replacement and expansion of utility and mechanical systems necessary to make the remodeled space energy efficient by current VA standards.

EWL's Role: Project Management, Civil Engineering & Electrical Engineering



Relevance: Embodies all aspects of project scope including pre-planning, investigations, design, project management, construction administration and managing multiple disciplines.

Owner: U.S. Department of Veterans Affairs George E. Wahlen Veterans Affairs Medical Center

Reference Name: Ms. Shannon Bush
Contact Information: 801-582-1565 x 4559

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5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT		
(Present no more than five (5) projects. Complete one Section 5 for each project.)		
a. TITLE AND LOCATION (City and State)	b. YEAR COMPLETED	
George E. Wahlen Department of Veterans Affairs Medical Center Lock Out Tag Out (LOTO) Study, Report, and Training, Salt Lake City, UT	PROFESSIONAL SERVICES In Design	CONSTRUCTION (If applicable) N/A
23. PROJECT OWNER'S INFORMATION		
c. PROJECT OWNER U.S. Department of Veterans Affairs George E. Wahlen Veterans Affairs Medical Center	d. DOLLAR AMOUNT OF PROJECT \$100,000	e. TOTAL COST OF PROJECT \$100,000
f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)		

Engineered with Layton (EWL) is the Prime A/E managing the entire design team's study of the George E. Wahlen Veterans Affairs Medical Center Campus Lock Out Tag Out (LOTO) Procedures. Following the study a report will be provided on how to better comply with OSHA code requirements and VA standards. The general lock out tag out procedures are being rewritten and developed for individual units for electrical, mechanical, and medical equipment.



This requires site surveys and gathering information to be compiled into a one page document that can be attached to the equipment or hung on the wall allowing anyone in the vicinity of the equipment to quickly and easily understand the dangers associated with the equipment. The document outlines the appropriate LOTO procedure each piece of equipment providing quick and safe instructions.

The final portion of the project is to provide training for the affected personnel and organize and deliver the appropriate material to the VA so in-house personnel can self-perform annually and meet OSHA requirements.

Approximate cost to the VA for these services is \$100,000.

EWL's Role: Project Management, Civil Engineering & Electrical Engineering

Owner: U.S. Department of Veterans Affairs George E. Wahlen Veterans Affairs Medical Center

Reference Name: Mr. Owen Motter

Contact Information: 801-584-1226

6. ADDITIONAL INFORMATION

a. PROVIDE ANY ADDITIONAL INFORMATION YOU FEEL MAY BE NECESSARY TO DESCRIBE YOUR FIRMS QUALIFICATIONS. (ATTACH ADDITIONAL SHEETS AS NEEDED.)

About Engineered With Layton

As you will learn while working with us, our goal is to establish long-term relationships...not just the next quick buck. We will work hard so you keep us as your engineer for a lifetime by:

- Performing at a level of honesty and integrity that far exceeds our competitors,
- At a price that is more affordable while
- Keeping you as an integral part of our design team...as our name dictates.

Our firm owner and principal engineer is a U.S. Air Force veteran. He joined the military at the age of 18 out of a desire to serve his country as a third consecutive generation of military servicemen. Thus as a service disabled veteran owned company it is our desire to continue this service and improve the lives of others. Our ancestry, background and existing community involvement indicate values of service above self are at our very core.

Vision Statement

Improving life's quality within our environment one project at a time.

Motto

Value engineering through reasonable fees, attention to detail and honest hard work.

Firm History

Engineered With Layton (EWL) was founded in 2007 as a civil, environmental and sanitary engineering firm. Since then, we have grown over 400% and specialize in multi-discipline engineering and planning, design, project management, permitting, construction services, building commissioning and assisting clients in securing project construction funding.

Core Competencies

- Civil Engineering
- Water/Wastewater/Reclaimed Water
- Environmental Engineering
- Electrical Engineering
- Structural Engineering*
- Mechanical Engineering*
- Plumbing Engineering*
- Survey*
- Architecture*
- Acoustical Engineering*
- Fire Protection Engineering*
- Technology Design*
- Lighting Design*
- Theatre Design*

**Indicates service offering provided through a strategic alliance with other like-minded firms.*

DUNS Number

808153378

Primary NAICS Codes

541330
541310
541620
541340

Cage Code

521L1

Certifications

- CVE Certified Service-Disabled Veteran Owned Small Business (SDVOSB)
- Veteran Owned Small Business (VOSB)
- Small Business (SB)

N. Emery Layton, P.E., Owner & Principal Engineer

Mr. Layton is the owner of an Arizona registered civil, environmental and sanitary engineering firm. He has over 12 years of experience as a regulatory, utility, and consulting engineer. His consulting experience includes design, value engineering design, construction management, on-site engineering, master planning, modeling and permitting. He is experienced in the planning, modeling design and construction oversight of public and private water systems, wastewater collection and treatment plant processes, recharge systems and reuse infrastructure as well as general site civil projects.

Through his service as an in-house engineering and construction manager for a \$36 million water, wastewater and reclaimed water utility, as well as his regulatory experience, Mr. Layton has learned how to interact with regulators and existing system operators to efficiently plan, design and permit infrastructure components that take a more practical approach to tackling everyday situations. His design build knowledge and experience as a professional in the medical field has equipped him with the skills to produce timely results with a high degree of accuracy. Additionally, Mr. Layton was recently selected by the Veteran's Administration as the prime A/E firm on several projects at the George C. Wahlen Medical Center in Salt Lake City.

In addition to his engineering experience, Mr. Layton is a military veteran, serving as a Medical Lab Technician (4T051) for the U.S. Air Force as an active duty member from 1992 to 1996, as well as a civilian working in public and private hospitals from 1993 to 2000 & 2008 to 2009. Mr. Layton received a honorable discharge for his dedicated service in 2000.

EWL Project List-Select Projects

Prime A/E-Current Projects

- George E. Wahlen Department of Veterans Affairs Medical Center Rehab / Prosthetics and Ortho / Neuro / Holistic Medicine Addition, Building B.01, Salt Lake City, UT
- George E. Wahlen Department of Veterans Affairs Medical Center Lock Out Tag Out (LOTO) Study, Report, and Training, Salt Lake City, UT

Water

- Global Water Resources, Valencia Water Company – Project for the feasibility planning, design and permitting for treatment optimization upgrades to a 5.0MGD arsenic treatment facility to include chemical feed upgrades, backwash system changes and sludge handling improvements, Buckeye, AZ.
- Village of Mayer, Domestic Water Improvement District – Projects include water treatment planning studies, coordination with State agencies to obtain project funding, project design, permitting, construction management and bidding services.
- Mayer DWID, Arsenic Treatment & New 200,000-gal Storage Tank, Mayer, AZ.
- Mayer DWID, 7,500-lf Waterline design, permitting, construction management, inspections, startup and final permitting services, Mayer, AZ.
- Mayer DWID, Arsenic Water Masterplan, Mayer, AZ.
- Mayer DWID, Lucas wellsite ownership study, Mayer, AZ.
- Mayer DWID, PumpTech wellsite feasibility study, Mayer, AZ.
- Village of Congress, Domestic Water Improvement District - projects include water planning studies, rate studies, asset management studies, development impact studies, coordination with state agencies to obtain project funding, project design, permitting, construction management and bidding services.
- Congress DWID, 10,000-lf Waterline design, permitting, construction management, inspections, startup and final permitting services, Congress, AZ.
- Congress DWID, Peak Demand Booster Pump Station, design, permitting, construction management, inspections, startup and final permitting services, Congress, AZ.
- Congress DWID, North Zone Booster Pump Station, design, permitting, construction management, inspections, startup and final permitting services, Congress, AZ.
- Congress DWID, System Master Plan, Asset Management Study & Drinking Water Rate Analysis – Approximately 3 square mile Domestic Water Improvement District, Congress, AZ.
- Congress DWID, 1,400-lf Waterline design, permitting, construction management, inspections, startup and final permitting services, Congress, AZ.
- Congress DWID, Development Services support to include negotiations with local developers, Congress, AZ.
- La Paz County Main Park Water System Improvements, design, permitting, construction management, inspections,

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startup and final permitting services, Parker, AZ.

- La Paz County Centennial Park Water System Improvements, project planning and design services, Salome, AZ
- Yarnell Water Company, Services required when taking over for a previous engineering firm who went bankrupt. Projects included funding services, permitting services, inspections and post construction permitting, Yarnell, AZ.
- Yarnell Water – Funding services and support for USDA-RD ARRA funded project, Yarnell, AZ.
- Yarnell Water – Permitting of storage tank rehabilitation, waterline installation and new storage tank.
- Yarnell Water – Planning services for establishment of a DWID, public outreach meetings, coordination with Federal funding agencies and company attorney and service area mapping services, Yarnell, AZ.
- Private Development, Fire line design, Phoenix, AZ
- Private Water Company, Waterline design services, Rio Rico, AZ
- Utility Engineering & Construction Services (E&C) Management – Various
- development services reviews of water masterplans, water system improvement design plans, specifications, construction inspections, post-construction testing, acceptance and permitting submittals.*
- Utility E&C Management, Rancho Mirage WDC Commissioning – Services included project feasibility planning, financial planning, bidding, contracting, equipment / material submittal reviews, inspections, testing & disinfection, punch-list, pay-app approvals, startup, Maricopa, AZ.*
- Utility E&C Management, Bales & Buena Vista Fill Lines – Services included permitting, coordination with multiple agencies, bid tabulation, contracting, equipment / material submittal reviews, traffic coordination, construction inspections, testing and disinfection, punch-list, pay-app approval, startup post-construction permitting, Buckeye, AZ.*
- Utility E&C Management, Edison Road Waterline Extension – Services included permitting approvals, contractor bid tabulation, contracting, equipment / material submittal reviews, traffic coordination, dry utility coordination, sub-contractor contracting, inspections, testing & disinfection, punch-list, pay-app approvals, startup, post-construction permitting, Maricopa, AZ.*
- Rancho Mercado Water Master Plan – 1310 acre development, Surprise, AZ**
- West Buckeye Regional (60,000 acre) Water Master Plan – 60,000 acre multideveloper project, Buckeye, AZ**
- 35th and Carver Water Master Plan – 61 acre development, Phoenix, AZ**
- Goldfield Water Due Diligence Study – 700 acre development, Maricopa County, AZ**
- Blue Hills Wells, Blending Tank, and Booster Station, Buckeye, AZ**
- Sonoran Vista Wells, Storage Tank, and Booster Station, Buckeye, AZ**
- Miller Road / RID canal waterline, Buckeye, AZ**
- Highway 79 Booster Station Design Concept Report, Florence, AZ**

Wastewater

- Hidden Meadow Ranch Engineer – Consultant and Design Services for 160 acre resort, near Greer, AZ.
- Hidden Meadow Ranch Engineer – Project planning, budgeting, contractor investigation, engineering estimates, project feasibility studies for new wastewater treatment plant and collection system, near Greer, AZ.
- Hidden Meadow Ranch Engineer – Project planning, site investigation services, design services, permitting services and inspection services for several onsite alternative septic treatment systems, near Greer, AZ.
- Homeowner Engineer – Project planning, site investigations, design services, permitting services, inspection services, startup services, operations training and final project permitting services for alternative septic systems, near Greer, AZ.
- Utility Engineering & Construction Services (E&C) Management – Various development services reviews of wastewater masterplans, wastewater system improvement design plans, specifications, construction inspections, postconstruction testing, acceptance and permitting submittals.*
- Utility E&C Management, Headworks Rehab – Services including planning, budgeting, internal funding approvals, contracts, inspections, project approval, punch-list, pay-app approval, Maricopa, AZ.*
- Utility E&C Management, Post EQ Basin, Facility Re-Piping – Services included bidding, contracts, submittal reviews, inspections, punch-list, project testing, payapp approvals, post-construction data analysis, Maricopa, AZ.*
- Utility E&C Management, Lagoon Clean Closure Permitting – Services included agency meetings, permitting negotiations, site plan creation, budget quotes, permitting documents, liner inspections, soil sampling, lab report analysis, Maricopa, AZ.*
- Utility E&C Management, Edison Road Sewerline Extension – Services included permitting approvals, contractor bid tabulation, contracting, equipment / material submittal reviews, traffic coordination, dry utility coordination, sub-contractor contracting, inspections, testing & disinfection, punch-list, pay-app approvals, startup, post-construction permitting, Maricopa, AZ.*
- Rancho Mercado Wastewater Master Plan – 1310 acres, Surprise, AZ**
- Buckeye (590 sq. miles) 208 Amendment, Buckeye, AZ**
- West Surprise Land Owners Group Sewer Design – 10.5 mile gravity sewer & 2 mile force main, Surprise, AZ**

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- 35th and Carver Wastewater Master Plan – 61 acres, Phoenix, AZ
- Goldfield Wastewater Due Diligence Study – 700 acres, Maricopa County, AZ**
- Tartesso Water Reclamation Facility Site Engineer – 1.2 MGD, Surprise, AZ**

- SPA 3 Water Reclamation Facility Design – 1.8 MGD, Surprise, AZ**
- Asante SPA 2 Water Reclamation Facility Design – 1.2 MGD, Surprise, AZ**
- Bisbee Wastewater Treatment Plant (1.2 MGD) & Mule Gulch Lift Station (0.8 MGD) Site Engineer, Bisbee, AZ**

Reclaimed Water

- Utility Engineering & Construction Services (E&C) Management, Permitting - AZPDES permitting for the Balterra WRF and Hassayampa WRF facilities, Tonopah, AZ.*
- Utility E&C Management, Reclaimed WMP – Reclaimed water masterplanning for the Palo Verde WRF due to additional customer demands, Maricopa, AZ.*
- Prasada Reclaimed Water Line Design, 20-inch – 5.5 miles, Surprise, AZ**
- Prasada Reclaimed Water Line Alignment Study & Surprise RW System Modeling – 15 miles, Surprise, AZ**
- 136th & Peoria Avenue Reclaimed Water Line, 30-inch – 1 mile, Surprise, AZ**
- Peoria Avenue Reclaimed Outlet, Metering and Throttling Structures, 24-inch – 3 each, Surprise, AZ**
- Asante SPA 2 Effluent Master Plan– 2.4 MGD, Surprise, AZ**
- Red Rock Effluent Master Plan – 2.0 MGD, Red Rock, AZ**
- Red Rock Reuse System Design – 2.0 MGD, Red Rock, AZ**
- Mountain House 6.0 MGD WRF Riverbend Effluent Diffuser, Tracy, CA**

Stormwater / Drainage

- Residential Custom Home, Civil Site Grading & Drainage Plan, Scottsdale, AZ.
- Springhill Suites Hotel Expansion, Civil Site and Grading & Drainage Plan, Tempe, AZ
- Homeowner, Drainage Investigation, Pinetop, AZ

Mr. Layton has been an engineering department manager/project manager, project engineer or designer on hundreds of other projects while serving in his roles as regulatory engineer, utility engineer or engineering consultant at other regional, national and international engineering firms.

*Indicates experience gained serving as the Engineering and Construction manager for Global Water Resources (while continuing to manage EWL projects)

**Indicates an Emery Layton project completed prior to creating EWL

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REVISED - Attachment I – General Qualifications**

7. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

a. Percentage of Total Work Attributable to State, Federal and Municipal Government Work:	98
b. Percentage of Total Work Attributable to Non-Government Work:	2

8. AUTHORIZED REPRESENTATIVE. The foregoing is a statement of facts.

Signature: 

Date: December 10, 2013

Name: N. Emery Layton, P.E., MLT

Title: Owner, Principal-in-Charge