



# Offer and Acceptance

State of Arizona  
State Procurement Office  
100 N. 15<sup>th</sup> Ave. Suite 201  
Phoenix, AZ 85007

SOLICITATION NO.: ADSP016-00005912 Request  
for Qualifications: 2016 Annual Professional  
Services List

PAGE  
1

Offeror: Burns & McDonnell Engineering Co., Inc.

OF  
1

## OFFER

### TO THE STATE OF ARIZONA:

The Undersigned hereby offers and agrees to furnish the material, service or construction in compliance with all terms, conditions, specifications and amendments in the Solicitation and any written exceptions in the offer. Signature also certifies Small Business status.

Burns & McDonnell Engineering Company, Inc.  
Company Name

2600 N. Central Avenue, Suite 1500  
Address

Phoenix                      Arizona                      85004  
City                                      State                                      Zip

tmartella@burnsmcd.com  
Contact Email Address

  
Signature of Person Authorized to Sign Offer

Tanya Martella  
Printed Name

Associate  
Title

Phone: 480-337-6502

Fax: 602-977-2660

By signature in the Offer section above, the Offeror certifies:

1. The submission of the Offer did not involve collusion or other anticompetitive practices.
2. The Offeror shall not discriminate against any employee or applicant for employment in violation of Federal Executive Order 11246, State Executive Order 2009-9 or A.R.S. §§ 41-1461 through 1465.
3. The Offeror has not given, offered to give, nor intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant in connection with the submitted offer. Failure to provide a valid signature affirming the stipulations required by this clause shall result in rejection of the offer. Signing the offer with a false statement shall void the offer, any resulting contract and may be subject to legal remedies provided by law.
4. The Offeror certifies that the above referenced organization  IS/  IS NOT a small business with less than 100 employees or has gross revenues of \$4 million or less.

## ACCEPTANCE OF OFFER

The Offer is hereby accepted.

The Contractor is now bound to sell the materials or services listed by the attached contract and based upon the solicitation, including all terms, conditions, specifications, amendments, etc., and the Contractor's Offer as accepted by the State.

This Contract shall henceforth be referred to as Contract No. ADSP016-00005912

The effective date of the Contract is March 1, 2016

The Contractor is cautioned not to commence any billable work or to provide any material or service under this contract until Contractor receives purchase order, contract release document or written notice to proceed.

State of Arizona  
Awarded this 1 day of March 20 16

  
Procurement Officer



ATTACHMENT I – General Qualifications

ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP015-00004729

STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007

## **Burns & McDonnell Engineering Company, Inc. Qualifications Package in Response to**

*2016 Annual Professional List  
Annual Request for Qualifications and Experience  
Solicitation No: ADSPO16-00005912*

*Due Date: December 21, 2015*



*Submitted: December 18, 2015*



ATTACHMENT I – General Qualifications  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912**

STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007

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

1. **Annual Request for Qualifications**

a. FIRM (OR BRANCH OFFICE ) NAME:	Burns & McDonnell Engineering Company, Inc.
b. FIRM (OR BRANCH OFFICE) STREET:	2600 N. Central Avenue, Suite 1500
c. FIRM (OR BRANCH OFFICE) CITY:	Phoenix
d. FIRM (OR BRANCH OFFICE) STATE:	Arizona
e. FIRM (OR BRANCH OFFICE) ZIP CODE:	85004
f. YEAR ESTABLISHED:	Phoenix office: 1998 / Firm: 1898
(g1). OWNERSHIP - TYPE:	S-Corporation
(g2) OWNERSHIP - SMALL BUSINESS STATUS:	N/A
h. POINT OF CONTACT NAME AND TITLE:	Ms. Tanya Martella, Associate
i. POINT OF CONTACT TELEPHONE NUMBER:	480-337-6502 (work) / 602-717-7748 (mobile)
j. POINT OF CONTACT E-MAIL ADDRESS:	tmartella@burnsmcd.com
k. NAME OF FIRM (If block 1a is a branch office):	



**ATTACHMENT I – General Qualifications**  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:**  
**ADSP016-00005912**

**STATE PROCUREMENT OFFICE**  
**Department of Administration**  
**100 North 15<sup>th</sup> Avenue, Suite 201**  
**Phoenix, Arizona 85007**

**2. EMPLOYEES BY DISCIPLINE**

a. Discipline Title	b. Function: Primary (P) or Secondary (S)	c. No. of Employees - Firm	d. No. of Employees - Branch
Architect	P	73	4
CADD Technician	P	322	8
Chemical Engineer	P	177	0
Civil Engineer	P	415	8
Construction Manager	P	55	0
Control Systems Engineer	P	98	1
Cost Engineer/Estimator	P	181	5
Electrical Engineer	P	790	17
Environmental Engineer	P	104	0
Environmental Scientist	P	109	1
Fire Protection Engineer	P	15	0
Industrial Engineer	P	378	0
Mechanical Engineer	P	485	18
Mining Engineer	P	17	1
Nuclear Engineer	P	8	2
Petroleum Engineer	P	102	0
Project Manager	P	513	9
Sanitary Engineer	P	75	0
Structural Engineer	P	311	8
Technical/Analyst	P	25	0
Water Resources Engineer	P	132	0
<b>Total</b>		<b>5131</b>	<b>86</b>



**ATTACHMENT I – General Qualifications**

**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912**

**STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007**

**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)
2	Activity Centers	5
0	Agricultural Development; Grain Storage; Farm Mechanization	0
20	Air Pollution Control	7
16	Airports; Nav aids; Airport Lighting; Aircraft Fueling	7
10	Airports; Terminals and Hangars; Freight Handling	8
9	Anti-Terrorism/Force Protection	8
1	Auditoriums/Theatres	1
6	Automation; Controls; Instrumentation	4
2	Barracks; Dormitories	4
2	Bridge Design	5
4	Chemical Processing & Storage	4
2	Child Care/Development Facilities	5
3	Codes; Standards; Ordinances	4
8	Cold Storage; Refrigeration and Fast Freeze	5
2	Commercial Building (low rise); Shopping Centers	3
3	Community Facilities	4
1	Computer Facilities	4
0	Conservation and Resource Management	0
5	Construction Management	7
3	Controls and Electronics Engineer	6
2	Cost Estimating; Cost Engineering and Analysis; Parametric Costing; Forecasting	4
10	Design-Build - Preparation of Requests for Proposals	6
1	Dining Halls; Clubs; Restaurants	4
4	Disability / Special Needs	4
3	Educational Facilities; Classrooms	3
6	Electrical Studies and Design	6



**ATTACHMENT I – General Qualifications**  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:**  
**ADSP016-00005912**

**STATE PROCUREMENT OFFICE**  
**Department of Administration**  
**100 North 15<sup>th</sup> Avenue, Suite 201**  
**Phoenix, Arizona 85007**

8	Elevators; Escalators; People-Movers	5
3	Energy / Water Auditing Savings	4
5	Energy Conservation; New Energy Sources	4
4	Environmental Impact Studies, Assessments or Statements	4
0	Fallout Shelters; Blast-Resistant Design	0
9	Fire Protection	6
3	Garages; Vehicle Maintenance Facilities; Parking	6
4	Heating; Ventilating; Air Conditioning	4
7	Highways; Streets; Airfield Paving; Parking Lots	7
0	Housing (Residential, Multi-Family; Apartments; Condominiums)	0
9	Industrial Buildings; Manufacturing Plants	7
5	Industrial Processes; Quality Control	7
2	Industrial Waste Treatment	5
9	Infrastructure	6
0	Judicial and Courtroom Facilities	0
0	Laboratories; Medical Research Facilities	0
1	Labs – General	4
1	Labs – Research – Dry	4
0	Labs Research – Wet	0
50	LEED Accredited A/E	8
2	LEED Independent 3 <sup>rd</sup> Party Building Commissioning Engineers	2
8	Lighting (Exteriors; Streets; Memorials; Athletic Fields, Etc.)	4
5	Lighting (Interior; Display; Theater, Etc.)	3
4	Measurement / Verification / Conservation Water Consumption Savings	4
0	Medical Related	0
1	Mining and Mineralogy	3
2	Modular Systems Design; Pre-Fabricated Structures or Components	4
4	Nuclear Facilities; Nuclear Shielding	6
2	Office Buildings; Industrial Parks	4



**ATTACHMENT I – General Qualifications**  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:**  
**ADSP016-00005912**

**STATE PROCUREMENT OFFICE**  
**Department of Administration**  
**100 North 15<sup>th</sup> Avenue, Suite 201**  
**Phoenix, Arizona 85007**

1	Outdoor Recreation	2
10	Petroleum and Fuel (Storage and Distribution)	7
8	Phase I Environmental	6
2	Pipelines (Cross-Country – Liquid & Gas)	7
10	Plumbing & Piping Design	5
4	Pneumatic Structures, Air-Support Buildings	0
30	Power Generation, Transmission, Distribution	10
0	Prisons & Correctional Facilities	0
2	Public Safety Facilities	4
1	Railroad; Rapid Transit	3
2	Recreation Facilities (Parks, Marinas, Etc.)	4
0	Refrigeration Plants/Systems	0
2	Rehabilitation (Buildings; Structures; Facilities)	4
2	Research Facilities	6
30	Resources Recovery; Recycling	6
0	Rivers; Canals; Waterways; Flood Control	0
0	Security Systems; Intruder & Smoke Detection	0
4	Seismic Designs & Studies	5
6	Sewage Collection, Treatment and Disposal	7
5	Solar Energy Utilization	6
0	Solid Wastes; Incineration; Landfill	0
0	Special Environments; Clean Rooms, Etc.	0
20	Specifications Writing	5
5	Storm Water Handling & Facilities	6
0	Structural Design; Special Structures	0
50	Sustainable Design	10
0	Towers(Self-Supporting & Guyed Systems)	0
5	Utilities (Gas and Steam)	8
2	Value Analysis; Life-Cycle Costing	2



ATTACHMENT I – General Qualifications

ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSPO16-00005912

STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007

1	Warehouses & Depots	4
10	Waste Water Treatment Facility	7
4	Water Resources; Hydrology; Ground Water	6
4	Water Supply; Treatment and Distribution	7
1	Wind Tunnels; Research/Testing Facilities Design	3

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               |



**ATTACHMENT I – General Qualifications**  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:**  
**ADSP016-00005912**

**STATE PROCUREMENT OFFICE**  
**Department of Administration**  
**100 North 15<sup>th</sup> Avenue, Suite 201**  
**Phoenix, Arizona 85007**

**4. Resumes of Key Personnel Proposed for this Contract** (Complete one Section 4 for each key person.)

a. NAME <b>Keith Koprowski, PE</b>	b. ROLE IN THIS CONTRACT <b>Project Manager, Senior Civil Engineer</b>	c. YEARS EXPERIENCE	
		1. TOTAL <b>15</b>	2. WITH CURRENT FIRM <b>4</b>
d. LOCATION (City and State) <b>Phoenix, Arizona</b>			
e. EDUCATION (DEGREE AND SPECIALIZATION) <ul style="list-style-type: none"> <li>B.S.E. Civil Engineering, Arizona State University</li> </ul>		f. PROFESSIONAL TRAINING - REGISTRATIONS <ul style="list-style-type: none"> <li>Professional Engineer – Arizona (Civil)</li> </ul>	
g. OTHER PROFESSIONAL QUALIFICATIONS (Organizations, Awards, etc.) N/A			

**H. RELEVANT PROJECTS**

	(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
		Professional Services	Construction (if applicable)
1.	<b>Papago Park Readiness Center, Arizona ARNG (ADOA Contract)</b> <b>Phoenix, Arizona</b>	2012	2014
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project manager for the 62,000 SF Readiness Center Design-Build project for the Arizona Army National Guard that was awarded through a previous ADOA contract. Facility features include private and open office administrative spaces; a Sensitive Compartmented Information Facility (SCIF) with raised access flooring; an assembly area; simulator training space; classrooms; individual and group equipment storage; a secure arms vault; and restroom/locker room support spaces. The facility was designed to meet (& did achieve) the USGBC LEED® Gold certification requirements. Koprowski was responsible for space planning, design, production, and quality assurance of architectural construction drawings and specifications.	<input checked="" type="checkbox"/>	Check if project performed with current firm
2.	<b>Florence Readiness Center, Arizona ARNG (ADOA Contract)</b> <b>Florence, Arizona</b>	2012	2013
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project manager for the 76,710 SF Readiness Center Design-Build project for the Arizona Army National Guard that was awarded through a previous ADOA contract. Facility features include open office and private administrative spaces; assembly areas; training and education spaces; individual and group equipment storage; two storage vaults; and a vehicle maintenance shop. The facility was designed to meet (& did achieve) the USGBC LEED® Gold certification requirements. Koprowski was responsible for direction and supervision of professional, technical, and administrative staff during the design of the new facilities as well as served as the main point of contact between the Design-Build Contractor, the State of Arizona Department of Emergency and Military Affairs, and the National Guard Bureau.	<input checked="" type="checkbox"/>	Check if project performed with current firm
3.	<b>Ocotillo Power Plant Drainage Master Plan, Arizona Public Service</b> <b>Tempe, Arizona</b>	2014	N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Quality Control Manager while Burns & McDonnell works as Owner's Engineer to support Arizona Public Service (APS) for an Engineer Procure Construct (EPC) project to modernize the power production at the Ocotillo Power Plant. Burns & McDonnell created a Drainage Master Plan to support the project and future development of the installation. Project includes preliminary development planning with City of Tempe and a Master Grading and Drainage Report to identify drainage solutions for the future development of the Ocotillo Power Plant. Koprowski was responsible for reviewing designs and providing quality assurance over drawings and specifications.	<input checked="" type="checkbox"/>	Check if project performed with current firm



**ATTACHMENT I – General Qualifications**

**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912**

**STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007**

4.	(1) TITLE AND LOCATION ( <i>City and State</i> ) <b>Yuma MCAS MILCON P447A, Aircraft Maintenance Hangar Modifications Yuma, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2013	Construction (if applicable) 2013
	(3) BRIEF DESCRIPTION ( <i>Brief scope, size, cost, etc.</i> ) AND SPECIFIC ROLE Design project manager on an A/E design services project for a facility modification to an existing legacy aircraft hangar. Project consisted of 52,500 SF of modifications and additions to accommodate the facility requirements of the new Joint Strike Fighter (JSF) aircraft. Facility provides a hangar bay, maintenance shops, and administrative and operations offices for the new JSF Mission at MCAS Yuma. The facility was designed to meet (& did achieve) the USGBC LEED® Gold certification requirements. Koprowski was responsible for overall design production and client coordination.	<input checked="" type="checkbox"/> Check if project performed with current firm	
5.	(1) TITLE AND LOCATION ( <i>City and State</i> ) <b>Squadron Operations Facility, Luke Air Force Base Glendale, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2012	Construction (if applicable) 2014
	(3) BRIEF DESCRIPTION ( <i>Brief scope, size, cost, etc.</i> ) AND SPECIFIC ROLE Provided design oversight for a new 22,000 SF modern and functional facility which houses the first five squadrons slotted for Luke Air Force Base. For security requirements, the facility has limited secure access and thus, nearly half of the facility is a SAPF space. It contains a secure pilot briefing area with individual flight briefing rooms and a larger briefing room along with Mission Planning, Weapons/Tactical Training, Intel/Weaponry, and TAC Plans. Koprowski reviewed designs and gave viable feedback to his team in completing this design.	<input checked="" type="checkbox"/> Check if project performed with current firm	



**ATTACHMENT I – General Qualifications**  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:**  
**ADSP016-00005912**

**STATE PROCUREMENT OFFICE**  
**Department of Administration**  
**100 North 15<sup>th</sup> Avenue, Suite 201**  
**Phoenix, Arizona 85007**

**4. Resumes of Key Personnel Proposed for this Contract** (Complete one Section 4 for each key person.)

a. NAME <b>Scott Mitchell, AIA, LEED GA</b>	b. ROLE IN THIS CONTRACT <b>Architect</b>	c. YEARS EXPERIENCE	
		1. TOTAL <b>18</b>	2. WITH CURRENT FIRM <b>4</b>
d. LOCATION (City and State) <b>Phoenix, Arizona</b>			
e. EDUCATION (DEGREE AND SPECIALIZATION) <ul style="list-style-type: none"> <li>B.A.S., Computer Aided Design – University of Advancing Technology</li> </ul>		f. PROFESSIONAL TRAINING - REGISTRATIONS <ul style="list-style-type: none"> <li>Registered Architect – Arizona</li> <li>Registered Architect – California</li> </ul>	
g. OTHER PROFESSIONAL QUALIFICATIONS (Organizations, Awards, etc.) <ul style="list-style-type: none"> <li>LEED Green Associate</li> </ul>			

**H. RELEVANT PROJECTS**

1.	(1) TITLE AND LOCATION (City and State) <b>Papago Park Readiness Center, Arizona ARNG (ADOA Contract)</b> <b>Phoenix, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2012	Construction (if applicable) 2014
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project architect for the 62,000 SF Readiness Center Design-Build project for the Arizona Army National Guard that was awarded through a previous ADOA contract. Facility features include private and open office administrative spaces; a Sensitive Compartmented Information Facility (SCIF) with raised access flooring; an assembly area; simulator training space; classrooms; individual and group equipment storage; a secure arms vault; and restroom/locker room support spaces. The facility was designed to meet (& did achieve) the USGBC LEED® Gold certification requirements. Mitchell was responsible for design, production, and quality assurance of architectural construction drawings and specifications.	<input checked="" type="checkbox"/> Check if project performed with current firm	
2.	(1) TITLE AND LOCATION (City and State) <b>Florence Readiness Center, Arizona ARNG (ADOA Contract)</b> <b>Florence, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2012	Construction (if applicable) 2013
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project architect on the 76,710 SF Readiness Center Design-Build project for the Arizona Army National Guard that was awarded through a previous ADOA contract. Facility features include open office and private administrative spaces; assembly areas; training and education spaces; individual and group equipment storage; two storage vaults; and vehicle maintenance shop. The facility was designed to meet (& did achieve) the USGBC LEED® Gold certification requirements. Mitchell was responsible for quality assurance reviews of architectural construction drawings and specifications. He provided construction administration services, including shop drawing review, site inspections, and final punch approval.	<input checked="" type="checkbox"/> Check if project performed with current firm	
3.	(1) TITLE AND LOCATION (City and State) <b>Joint Forces Los Alamitos Building 4 Renovation</b> <b>Los Alamitos, California</b>	(2) YEAR COMPLETED	
		Professional Services 2013	Construction (if applicable) 2014
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project architect for the Type A services for the California Army National Guard (CA ARNG). The existing Building 4 at Joint Force Training Base Los Alamitos was considered for renovations and repurposing into the southern regional headquarters for the California Governor's Office of Emergency Services (CalOES). The Type A service project involved an extensive investigation of the existing 16,800 SF facility, including physical condition, structural and seismic capacity, hazardous materials assessment, and utility service capacity. Three optional floor plans were evaluated as potential courses of action, based on programming efforts coordinated with CA ARNG and CalOES facilities and engineering staff. Mitchell was responsible for quality assurance reviews of architectural construction drawings and specifications.	<input checked="" type="checkbox"/> Check if project performed with current firm	



**ATTACHMENT I – General Qualifications**

**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912**

**STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007**

4.	(1) TITLE AND LOCATION ( <i>City and State</i> ) <b>Northrop Grumman Plant 42, Building 401 E-line Addition Palmdale, California</b>	(2) YEAR COMPLETED	
		Professional Services 2015	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION ( <i>Brief scope, size, cost, etc.</i> ) AND SPECIFIC ROLE Project architect for the design and construction administration services for an addition of an approximately 73,000 SF office structure within existing hangar B401 at the Northrop Grumman Corporation (NGC) site. The new addition consists of two floors of office space above an open first level storage and circulation area, located within the existing hangar space, adjacent to and connected through, an existing administration area. Each floor consists of a number of enclosed office spaces, conference rooms, open office areas for modular workstations, break areas, huddle rooms, and restrooms. The entirety of each working area of the facility addition is designed to meet the requirements of ICD/ICS 705, Technical Specifications for Construction and Management of Sensitive Compartmented Information Facilities (SCIF). Interior spaces are defined by strategic use of various colors, materials, and textures such as wood slat paneling, butt-glazed storefront, and a combination of exposed and suspended acoustical tile ceilings to place emphasis on work groups or special areas. Mitchell was responsible for quality assurance reviews of architectural construction drawings and specifications.	<input checked="" type="checkbox"/>	Check if project performed with current firm
5.	(1) TITLE AND LOCATION ( <i>City and State</i> ) <b>Security Forces Facility Addition, CA Air National Guard Moffett Federal Airfield, Mountain View, California</b>	(2) YEAR COMPLETED	
		Professional Services 2015	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION ( <i>Brief scope, size, cost, etc.</i> ) AND SPECIFIC ROLE Project architect for an addition and renovations to the existing Building 653 at Moffett Federal Airfield, in support of the California Air National Guard. Administrative spaces and functions will be consolidated from their current disbursement among three different facilities at the project site, into the newly renovated Security Forces Facility. The additional facility square footage will house the Security Forces Squadron's (SFS) combat arms training simulator and combat arms training maintenance operations. Interior renovations include selective demolition; construction of new walls and doors; replacement of plumbing fixtures; upgrades to mechanical systems; and freshening of finishes throughout. Mitchell was responsible for quality assurance reviews of architectural construction drawings and specifications.	<input checked="" type="checkbox"/>	Check if project performed with current firm



**ATTACHMENT I – General Qualifications**  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:**  
**ADSP016-00005912**

**STATE PROCUREMENT OFFICE**  
**Department of Administration**  
**100 North 15<sup>th</sup> Avenue, Suite 201**  
**Phoenix, Arizona 85007**

**4. Resumes of Key Personnel Proposed for this Contract** (Complete one Section 4 for each key person.)

a. NAME <b>Justin Isner, PE</b>	b. ROLE IN THIS CONTRACT <b>Civil Engineer, Site</b>	c. YEARS EXPERIENCE	
		1. TOTAL <b>15</b>	2. WITH CURRENT FIRM <b>5</b>
d. LOCATION (City and State) <b>Phoenix, Arizona</b>			
e. EDUCATION (DEGREE AND SPECIALIZATION) <ul style="list-style-type: none"> <li>Bachelor of Science, Civil Engineering – West Virginia University</li> </ul>		f. PROFESSIONAL TRAINING - REGISTRATIONS <ul style="list-style-type: none"> <li>Professional Engineer – Arizona (Civil)</li> <li>Construction Quality Control Manager, NAVFAC/COE</li> </ul>	
g. OTHER PROFESSIONAL QUALIFICATIONS (Organizations, Awards, etc.) <ul style="list-style-type: none"> <li>Society of American Military Engineers (Young Member), Phoenix Post</li> </ul>			

**H. RELEVANT PROJECTS**

	(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
		Professional Services	Construction (if applicable)
1.	<b>Papago Park Readiness Center, Arizona ARNG (ADOA Contract)</b> <b>Phoenix, Arizona</b>	2012	2014
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Civil engineer on the 62,000 SF Readiness Center Design-Build project for the Arizona Army National Guard that was awarded through a previous ADOA contract. Facility features include private and open office administrative spaces; a Sensitive Compartmented Information Facility (SCIF) with raised access flooring; an assembly area; simulator training space; classrooms; individual and group equipment storage; a secure arms vault; and restroom/locker room support spaces. The facility was designed to meet (& did achieve) the USGBC LEED® Gold certification requirements. Isner was responsible for the full civil site design as well as worked with the contractor to obtain required permits for construction activities.	<input checked="" type="checkbox"/>	Check if project performed with current firm
2.	<b>Florence Readiness Center, Arizona ARNG (ADOA Contract)</b> <b>Florence, Arizona</b>	2012	2013
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Civil engineer on the 76,710 SF Readiness Center Design-Build project for the Arizona Army National Guard that was awarded through a previous ADOA contract. Facility features include open office and private administrative spaces; assembly areas; training and education spaces; individual and group equipment storage; two storage vaults; and a vehicle maintenance shop. The facility was designed to meet (& did achieve) the USGBC LEED® Gold certification requirements. Isner focused on the housing development, which is sited on 11 acres and contains 85-100 single-family homes with an average size of 2,200 SF in two stories. Isner was responsible for providing preliminary drainage studies, traffic impact studies, grading and drainage plans, water, sewer, paving and SWPPP plans, concept landscape plans, signing and striping, drainage reports, preparation of 404 Permit Application, and coordination with and meetings with City staff, local school district staff, Street Light Improvement District staff, fire department, city water & sewer departments, and engineering.	<input checked="" type="checkbox"/>	Check if project performed with current firm
3.	<b>Reclaimed Water Recharge Reservoirs &amp; Park</b> <b>Casa Grande, Arizona</b>	2012	2012
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Site civil engineer with the City of Casa Grande developing, designing and constructing a series of basins that serve as both a recharge facility and a public park amenity. The primary purpose for the basins is to recharge the reclaimed water coming from the City's water reclamation facility. This valuable resource recharges into the local aquifer where it can be withdrawn at later times for	<input checked="" type="checkbox"/>	Check if project performed with current firm



**ATTACHMENT I – General Qualifications**

**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912**

**STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007**

beneficial reuse. With the construction of basins, a public park amenity was also included. Wide walking paths, benches and native landscaping provide a backdrop for the basins. Isner was responsible for deciding where those walking paths were laid.

	(1) TITLE AND LOCATION ( <i>City and State</i> ) <b>Ocotillo Power Plant Drainage Master Plan, Arizona Public Service Tempe, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2014	Construction (if applicable) N/A
4.	(3) BRIEF DESCRIPTION ( <i>Brief scope, size, cost, etc.</i> ) AND SPECIFIC ROLE Civil engineer while Burns & McDonnell works as Owner's Engineer to support Arizona Public Service (APS) for an Engineer Procure Construct (EPC) project to modernize the power production at the Ocotillo Power Plant. Burns & McDonnell created a Drainage Master Plan to support the project and future development of the installation. The project includes preliminary development planning with City of Tempe and a Master Grading and Drainage Report to identify drainage solutions for the future development of the Ocotillo Power Plant. Isner led the effort and writing the Drainage Report.	<input checked="" type="checkbox"/>	Check if project performed with current firm
	(1) TITLE AND LOCATION ( <i>City and State</i> ) <b>American Airlines Rebranding Phoenix Sky Harbor International Airport, Phoenix, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2015	Construction (if applicable) 2015
5.	(3) BRIEF DESCRIPTION ( <i>Brief scope, size, cost, etc.</i> ) AND SPECIFIC ROLE Construction administration representative at Phoenix Sky Harbor International Airport for American Airlines Rebranding activities. The scope of work includes surveying and design implementation to replace all millwork and signage with AA New Next Gen Standards to consolidate Legacy American Airlines and Legacy US Airways as a single new identity, American.	<input checked="" type="checkbox"/>	Check if project performed with current firm



**ATTACHMENT I – General Qualifications**  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:**  
**ADSP016-00005912**

**STATE PROCUREMENT OFFICE**  
**Department of Administration**  
**100 North 15<sup>th</sup> Avenue, Suite 201**  
**Phoenix, Arizona 85007**

**4. Resumes of Key Personnel Proposed for this Contract** (Complete one Section 4 for each key person.)

a. NAME <b>Steve Peterson, PE, LEED AP</b>	b. ROLE IN THIS CONTRACT <b>Mechanical Engineer, Solar Photovoltaic Designer</b>	c. YEARS EXPERIENCE	
		1. TOTAL <b>29</b>	2. WITH CURRENT FIRM <b>4</b>
d. LOCATION (City and State) <b>Phoenix, Arizona</b>			
e. EDUCATION (DEGREE AND SPECIALIZATION) <ul style="list-style-type: none"> <li>Bachelor of Science in Mechanical Engineering – University of California at Berkeley</li> </ul>		f. PROFESSIONAL TRAINING – REGISTRATIONS <ul style="list-style-type: none"> <li>Professional Engineer – Arizona (Mechanical)</li> <li>Professional Engineer – Nevada (Mechanical)</li> </ul>	
g. OTHER PROFESSIONAL QUALIFICATIONS (Organizations, Awards, etc.) <ul style="list-style-type: none"> <li>LEED Accredited Professional</li> </ul>			

**H. RELEVANT PROJECTS**

1.	(1) TITLE AND LOCATION (City and State) <b>Papago Park Readiness Center, Arizona ARNG (ADOA Contract)</b> <b>Phoenix, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2012	Construction (if applicable) 2014
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Provided quality assurance for the 62,000 SF Readiness Center Design-Build project for the Arizona Army National Guard that was awarded through a previous ADOA contract. Facility features include private and open office administrative spaces; a Sensitive Compartmented Information Facility (SCIF) with raised access flooring; an assembly area; simulator training space; classrooms; individual and group equipment storage; a secure arms vault; and restroom/locker room support spaces. The facility was designed to meet (& did achieve) the USGBC LEED® Gold certification requirements. Peterson provided quality assurance/quality control for the warranty items on the project.	<input checked="" type="checkbox"/>	Check if project performed with current firm
2.	(1) TITLE AND LOCATION (City and State) <b>Florence Readiness Center, Arizona ARNG (ADOA Contract)</b> <b>Florence, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2012	Construction (if applicable) 2013
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Mechanical engineer on the 76,710 SF Readiness Center Design-Build project for the Arizona Army National Guard that was awarded through a previous ADOA contract. Facility features include open office and private administrative spaces; assembly areas; training and education spaces; individual and group equipment storage; two storage vaults; and a vehicle maintenance shop. The facility was designed to meet (& did achieve) the USGBC LEED® Gold certification requirements. Peterson was responsible for reviewing design and detailing of the electrical system, coordinating with architectural, mechanical, and civil disciplines, and for construction administration.	<input checked="" type="checkbox"/>	Check if project performed with current firm
3.	(1) TITLE AND LOCATION (City and State) <b>Gila Bend Solar Power Plant, Arizona Public Service</b> <b>Gila Bend, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2013	Construction (if applicable) 2014
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Provided quality assurance services while Burns & McDonnell served as Owner's Engineer during the development and construction of the Gila Bend 32 MW solar power plant. Acted as a sounding board for the team and reviewed bid support; site development; cost/schedule support; submittals; technical design; civil, electrical and substation design; and project engineering.	<input checked="" type="checkbox"/>	Check if project performed with current firm
4.	(1) TITLE AND LOCATION (City and State) <b>Mesquite Solar West, Sempra Energy</b> <b>Maricopa, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2012	Construction (if applicable) 2013



**ATTACHMENT I – General Qualifications**

**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912**

**STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007**

	<p>(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE Project manager while Burns &amp; McDonnell served as Owner's Engineer developing Sempra Energy's Mesquite 170 MW photovoltaic (PV) power plant in western Phoenix, Arizona. The project utilized Suntech's new Pluto PV technology and liquid cooled inverters and energy modeling with PVSystem. Assisted in selecting a successful bidder, reviewing design, monitoring construction, and providing over-sight for the plant's commissioning and performance testing.</p>	<input checked="" type="checkbox"/> Check if project performed with current firm				
5.	<p>(1) TITLE AND LOCATION (<i>City and State</i>) <b>HEXCEL Steam System Upgrade Casa Grande, Arizona</b></p>	<p>(2) YEAR COMPLETED</p> <table border="1"> <tr> <td>Professional Services</td> <td>Construction (if applicable)</td> </tr> <tr> <td>2015</td> <td>Ongoing</td> </tr> </table>	Professional Services	Construction (if applicable)	2015	Ongoing
	Professional Services	Construction (if applicable)				
2015	Ongoing					
<p>(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE Project manager responsible for design and specifications of new steam boiler and expander system. Work included replacement of steam piping and controls, and studies of solar thermal, natural gas, and steam, as fuel source for expander process.</p>	<input checked="" type="checkbox"/> Check if project performed with current firm					



**ATTACHMENT I – General Qualifications**  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:**  
**ADSP016-00005912**

**STATE PROCUREMENT OFFICE**  
**Department of Administration**  
**100 North 15<sup>th</sup> Avenue, Suite 201**  
**Phoenix, Arizona 85007**

**4. Resumes of Key Personnel Proposed for this Contract** (Complete one Section 4 for each key person.)

a. NAME <b>Nathan Thompson, PE CFM</b>	b. ROLE IN THIS CONTRACT <b>Civil Engineer, Stormwater / Drainage</b>	c. YEARS EXPERIENCE	
		1. TOTAL <b>12</b>	2. WITH CURRENT FIRM <b>7</b>
d. LOCATION (City and State) <b>Phoenix, Arizona</b>			
e. EDUCATION (DEGREE AND SPECIALIZATION) <ul style="list-style-type: none"> <li>• M.S., Civil &amp; Environmental Engineering – Brigham Young University</li> <li>• B.S., Civil &amp; Environmental Engineering – Brigham Young University</li> </ul>		f. PROFESSIONAL TRAINING – REGISTRATIONS <ul style="list-style-type: none"> <li>• Professional Engineer – Arizona (Civil)</li> <li>• Certified Floodplain Manager – Arizona</li> </ul>	
g. OTHER PROFESSIONAL QUALIFICATIONS (Organizations, Awards, etc.) <ul style="list-style-type: none"> <li>• Association of State Floodplain Managers (ASFPM)</li> <li>• Arizona Floodplain Management Association (AFMA)</li> </ul>			

**H. RELEVANT PROJECTS**

	(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
		Professional Services	Construction (if applicable)
1.	<b>Reclaimed Water Recharge Reservoirs &amp; Park Casa Grande, Arizona</b>	2012	2012
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Civil/drainage engineer for the Reclaimed Water Recharge Reservoirs project for the City of Casa Grande, developing, designing and constructing a series of basins that serve as both a recharge facility and a public park amenity. The primary purpose for the basins is to recharge the reclaimed water coming from the City's water reclamation facility. This valuable resource will recharge into the local aquifer where it can be withdrawn at a later time for beneficial reuse. With the construction of basins, a public park amenity was also included. Wide walking paths, benches and native landscaping provide a backdrop for the basins. Thompson was responsible for deciding where basins would go throughout the site.	<input checked="" type="checkbox"/>	Check if project performed with current firm
2.	<b>Ocotillo Power Plant Drainage Master Plan, Arizona Public Service Tempe, Arizona</b>	2014	N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Civil reviewer while Burns & McDonnell works as Owner's Engineer to support Arizona Public Service (APS) for an Engineer Procure Construct (EPC) project to modernize the power production at the Ocotillo Power Plant. Burns & McDonnell created a Drainage Master Plan to support the project and future development of the installation. The project includes preliminary development planning with City of Tempe and a Master Grading and Drainage Report to identify drainage solutions for the future development of the Ocotillo Power Plant. Thompson was responsible for assisting Justin Isner with the drainage report.	<input checked="" type="checkbox"/>	Check if project performed with current firm
3.	<b>Mesquite Solar West, Sempra Energy Maricopa County, Arizona</b>	2012	2013
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Civil engineer while Burns & McDonnell acted as Owner's Engineer developing Sempra Energy's Mesquite 170 MW photovoltaic (PV) power plant in western Phoenix, Arizona. The project utilized Suntech's new Pluto PV technology and liquid cooled inverters and energy modeling with PVSyst. Thompson was responsible for the Drainage Report, conceptual plans, and civil narrative in support of the Special Use Permit (SUP). He was instrumental in the detailed civil infrastructure design plans for bidding, which became the basis of the construction plans. He was assigned as civil reviewer of the	<input checked="" type="checkbox"/>	Check if project performed with current firm



**ATTACHMENT I – General Qualifications**

**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSPO16-00005912**

**STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007**

construction permit drawings and drainage reports and performed the appropriate research, analyses, calculations, and designs to meet the high level of detail requisite for the SUP. Thompson designed the channel / embankment linings based on most current products available, and local materials & experience. He developed cost estimations to evaluate design concepts.

(1) TITLE AND LOCATION ( <i>City and State</i> ) <b>Sun Valley North Solar Project, Capital Power Maricopa County, Arizona</b>	(2) YEAR COMPLETED	
	Professional Services 2015	Construction (if applicable) N/A

4. (3) BRIEF DESCRIPTION (*Brief scope, size, cost, etc.*) AND SPECIFIC ROLE  
Civil engineer to support a Special Use Permit (zoning/land use related permit) and County Variance for a 3.3-square mile, 200 MW solar energy (PV) project. As Owner's Engineer, Burns & McDonnell provided preliminary project designs and conceptual system layouts incorporating multiple solar technologies for the project. In preparation for the completion of the SUP permit application, Burns & McDonnell provided preliminary design and evaluations of multiple drainage schemes for evaluation and an ultimate selection for inclusion in the SUP application package along with a comprehensive drainage report. Thompson was responsible for the drainage report, and assisting with the civil designs and cost estimates. He wrote the SUP draft narrative and used HEC-1 and the County's program, DDMSW for detailed hydrologic analyses. He used ArcGIS, Version 10 to research land uses, zoning, etc., to calculate hydrologic parameters, and to make the maps used in the drainage report and SUP narrative.

<input checked="" type="checkbox"/>	Check if project performed with current firm
-------------------------------------	--

(1) TITLE AND LOCATION ( <i>City and State</i> ) <b>Water Ranch Reclamation Facility, Town of Cave Creek Cave Creek, Arizona</b>	(2) YEAR COMPLETED	
	Professional Services 2008	Construction (if applicable) 2010

5. (3) BRIEF DESCRIPTION (*Brief scope, size, cost, etc.*) AND SPECIFIC ROLE  
Responsible for the civil project specifications, the grading & drainage plans; pavement plans; utilities; yard process piping layout; arterial road improvement plans (new lanes on Carefree Hwy); signing/stripping plans; and SWPPP for the Water Ranch Reclamation Facility for the Town of Cave Creek. Thompson prepared the drainage report which included culvert and channel design, and a riprap dissipater pool and other riprap designs. He researched boundary surveys, rights of way, and easement locations. He followed the Town of Cave Creek technical design guidelines, MCDOT manuals, and utilized MAG Std. details & spec's. He implemented a notification/coordination process for utility conflicts, including organizing meetings with a number of utility companies. Thompson also prepared calculations for the pavement structure design for new lanes on Carefree Hwy and gained MCDOT's approvals and assisted with the design of a riprap launch system to protect a sewer main within a major wash (Maricopa County Flood Control District submittal).

<input checked="" type="checkbox"/>	Check if project performed with current firm
-------------------------------------	--



**ATTACHMENT I – General Qualifications**  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:**  
**ADSP016-00005912**

**STATE PROCUREMENT OFFICE**  
**Department of Administration**  
**100 North 15<sup>th</sup> Avenue, Suite 201**  
**Phoenix, Arizona 85007**

**4. Resumes of Key Personnel Proposed for this Contract** (Complete one Section 4 for each key person.)

a. NAME <b>Jason Hope, PE</b>	b. ROLE IN THIS CONTRACT <b>Structural Engineer</b>	c. YEARS EXPERIENCE	
		1. TOTAL <b>14</b>	2. WITH CURRENT FIRM <b>8</b>
d. LOCATION (City and State) <b>Phoenix, Arizona</b>			
e. EDUCATION (DEGREE AND SPECIALIZATION) <ul style="list-style-type: none"> <li>B.S.D. (Architecture) – Arizona State University</li> <li>M.S. Structural Engineering – Arizona State University</li> </ul>		f. PROFESSIONAL TRAINING - REGISTRATIONS <ul style="list-style-type: none"> <li>Professional Engineer – Arizona (Structural)</li> </ul>	
g. OTHER PROFESSIONAL QUALIFICATIONS (Organizations, Awards, etc.) <ul style="list-style-type: none"> <li>American Institute of Architects</li> </ul>			

**H. RELEVANT PROJECTS**

1.	(1) TITLE AND LOCATION (City and State) <b>Papago Park Readiness Center, Arizona ARNG (ADOA Contract)</b> <b>Phoenix, Arizona</b>	(2) YEAR COMPLETED	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Structural engineer on the 62,000 SF Readiness Center Design-Build project for the Arizona Army National Guard that was awarded through a previous ADOA contract. Facility features include private and open office administrative spaces; a Sensitive Compartmented Information Facility (SCIF) with raised access flooring; an assembly area; simulator training space; classrooms; individual and group equipment storage; a secure arms vault; and restroom/locker room support spaces. The facility was designed to meet (& did achieve) the USGBC LEED® Gold certification requirements. Hope was responsible for design and detailing of the structural system, coordination with architectural, mechanical, electrical and civil disciplines, and for construction administration.	Professional Services 2012	Construction (if applicable) 2014
		<input checked="" type="checkbox"/> Check if project performed with current firm	
2.	(1) TITLE AND LOCATION (City and State) <b>Florence Readiness Center, Arizona ARNG (ADOA Contract)</b> <b>Florence, Arizona</b>	(2) YEAR COMPLETED	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Structural engineer on the 76,710 SF Readiness Center Design-Build project for the Arizona Army National Guard that was awarded through a previous ADOA contract. Facility features include open office and private administrative spaces; assembly areas; training and education spaces; individual and group equipment storage; two storage vaults; and a vehicle maintenance shop. The facility was designed to meet (& did achieve) the USGBC LEED® Gold certification requirements. Hope was responsible for design and detailing of the structural system, coordination with architectural, mechanical, electrical and civil disciplines, and for construction administration.	Professional Services 2012	Construction (if applicable) 2013
		<input checked="" type="checkbox"/> Check if project performed with current firm	
3.	(1) TITLE AND LOCATION (City and State) <b>Gila Bend Solar Power Plant, Arizona Public Service</b> <b>Gila Bend, Arizona</b>	(2) YEAR COMPLETED	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Assisted Mr. Peterson with quality assurance/quality control services while Burns & McDonnell served as Owner's Engineer during the development and construction of the Gila Bend 32 MW Solar Power Plant. Acted as a sounding board for the team and reviewed bid support, site development, cost/schedule support, submittal review, technical review, civil design, electrical design, substation design, and project engineering alongside Mr. Peterson.	Professional Services 2013	Construction (if applicable) 2014
		<input checked="" type="checkbox"/> Check if project performed with current firm	



**ATTACHMENT I – General Qualifications**

**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912**

**STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007**

4.	(1) TITLE AND LOCATION ( <i>City and State</i> ) <b>Water Ranch Reclamation Facility, Town of Cave Creek Cave Creek, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2008	Construction (if applicable) 2010
	(3) BRIEF DESCRIPTION ( <i>Brief scope, size, cost, etc.</i> ) AND SPECIFIC ROLE Quality control manager for the Water Ranch Reclamation Facility for the Town of Cave Creek when Burns & McDonnell was selected to provide comprehensive planning, programming and A/E design services as the designer of a design/build project team. The project provided a 0.66 mgd wastewater treatment facility to replace the existing plant. Sewage was conveyed from the existing treatment plant site to a new site. Hope was responsible for quality control of all project elements.	<input checked="" type="checkbox"/> Check if project performed with current firm	
5.	(1) TITLE AND LOCATION ( <i>City and State</i> ) <b>K-Tron Tank Hopper at Bridgestone Biorubber Process Research Center Mesa, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2015	Construction (if applicable) 2015
	(3) BRIEF DESCRIPTION ( <i>Brief scope, size, cost, etc.</i> ) AND SPECIFIC ROLE Project manager and lead structural engineer for the K-Tron Tank Hopper at Bridgestone Biorubber Process Research Center project. The project included structural engineering analysis, evaluation, and design of structural modifications to structural supports of the K-Tron tank/hopper associated with the installation of a new hopper, (4) load transducers, and the installation of a new screw conveyor.	<input checked="" type="checkbox"/> Check if project performed with current firm	



**ATTACHMENT I – General Qualifications**  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:**  
**ADSP016-00005912**

**STATE PROCUREMENT OFFICE**  
**Department of Administration**  
**100 North 15<sup>th</sup> Avenue, Suite 201**  
**Phoenix, Arizona 85007**

**4. Resumes of Key Personnel Proposed for this Contract** (Complete one Section 4 for each key person.)

a. NAME <b>Andy Hornick, PE</b>	b. ROLE IN THIS CONTRACT <b>Structural Engineer</b>	c. YEARS EXPERIENCE	
		1. TOTAL <b>14</b>	2. WITH CURRENT FIRM <b>14</b>
d. LOCATION (City and State) <b>Phoenix, Arizona</b>			
e. EDUCATION (DEGREE AND SPECIALIZATION) <ul style="list-style-type: none"> <li>Associate in Architectural Engineering Technology – Pennsylvania State University, 1998</li> <li>B.S. Structural Design and Construction Engineering Technology – Pennsylvania State University, 2000</li> </ul>		f. PROFESSIONAL TRAINING - REGISTRATIONS <ul style="list-style-type: none"> <li>Professional Engineer – Arizona (Structural)</li> <li>Professional Engineer – Pennsylvania (Structural)</li> <li>Professional Engineer – Oklahoma (Structural)</li> <li>Professional Engineer – Montana (Structural)</li> </ul>	
g. OTHER PROFESSIONAL QUALIFICATIONS (Organizations, Awards, etc.) <ul style="list-style-type: none"> <li>NCEES Record Holder</li> </ul>			

**H. RELEVANT PROJECTS**

1.	(1) TITLE AND LOCATION (City and State) <b>Reclaimed Water Recharge Reservoirs &amp; Park Casa Grande, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2012	Construction (if applicable) 2012
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Structural engineer for the Reclaimed Water Recharge Reservoirs project for the City of Casa Grande, developing, designing and constructing a series of basins that serve as both a recharge facility and a public park amenity. The primary purpose for the basins is to recharge the reclaimed water coming from the City's water reclamation facility. This valuable resource will recharge into the local aquifer where it can be withdrawn at a later time for beneficial reuse. With the construction of basins, a public park amenity was also included. Wide walking paths, benches and native landscaping provide a backdrop for the basins. Hornick was responsible for the structural design of the basins.	<input checked="" type="checkbox"/>	Check if project performed with current firm
2.	(1) TITLE AND LOCATION (City and State) <b>Cooling Tower Survey, Mesquite Power Buckeye, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2012	Construction (if applicable) 2012
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Structural engineer for the Cooling Tower Survey for Mesquite Power. He completed a condition survey of two, reinforced concrete, cooling tower basins; and performed a visual inspection of two, 580 feet X 48 feet, concrete, cooling tower basins that were constructed in 2003. His primary responsibilities included performing an evaluation and assessment of concrete distress, where he then recommended repairs that would reduce further deterioration of the concrete.	<input checked="" type="checkbox"/>	Check if project performed with current firm
3.	(1) TITLE AND LOCATION (City and State) <b>Water Ranch Reclamation Facility, Town of Cave Creek Cave Creek, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2008	Construction (if applicable) 2010
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Structural engineer for the Water Ranch Reclamation Facility for the Town of Cave Creek when Burns & McDonnell was selected to provide comprehensive planning, programming and A/E design services as the designer of a design/build project team. The project provided a 0.66 mgd wastewater treatment facility to replace the existing plant. Sewage was conveyed from the existing treatment plant site to a new site. He was responsible for all structural elements of the project.	<input checked="" type="checkbox"/>	Check if project performed with current firm



**ATTACHMENT I – General Qualifications**

**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912**

**STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007**

4.	(1) TITLE AND LOCATION ( <i>City and State</i> ) <b>Mulberry Wastewater Plant Upgrades for City of Lake Havasu Lake Havasu, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2000	Construction (if applicable) 2001
	(3) BRIEF DESCRIPTION ( <i>Brief scope, size, cost, etc.</i> ) AND SPECIFIC ROLE Assisted in the design for Mulberry Wastewater Plant upgrades for the City of Lake Havasu, Arizona. His primary responsibilities included the design of a 126' diameter reinforced concrete aeration basin; tertiary filter basin; three-channel U.V. disinfection system, and an exterior odor control chemical containment area.	<input checked="" type="checkbox"/> Check if project performed with current firm	
5.	(1) TITLE AND LOCATION ( <i>City and State</i> ) <b>Bottom Ash Hopper Roof, Arizona Public Service Farmington, New Mexico</b>	(2) YEAR COMPLETED	
		Professional Services 2012	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION ( <i>Brief scope, size, cost, etc.</i> ) AND SPECIFIC ROLE Completed a structural site visit to verify record drawing compliance for modifications and replacement of monorails in Bottom Ash Hoppers of Units 4 and 5 for Arizona Power Service, Farmington, New Mexico facility.	<input checked="" type="checkbox"/> Check if project performed with current firm	



**ATTACHMENT I – General Qualifications**  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:**  
**ADSP016-00005912**

**STATE PROCUREMENT OFFICE**  
**Department of Administration**  
**100 North 15<sup>th</sup> Avenue, Suite 201**  
**Phoenix, Arizona 85007**

**4. Resumes of Key Personnel Proposed for this Contract** (Complete one Section 4 for each key person.)

a. NAME <b>Bill Schweitzer, PE, RCDD/OSP, LEED AP</b>	b. ROLE IN THIS CONTRACT <b>Project Manager</b>	c. YEARS EXPERIENCE	
		1. TOTAL <b>23</b>	2. WITH CURRENT FIRM <b>6</b>
d. LOCATION (City and State) <b>Recently relocated from Phoenix to Minneapolis-St. Paul; remaining connected to Arizona office / projects</b>			
e. EDUCATION (DEGREE AND SPECIALIZATION) <ul style="list-style-type: none"> <li>Bachelor Electrical Engineering – South Dakota State University</li> </ul>		f. PROFESSIONAL TRAINING - REGISTRATIONS <ul style="list-style-type: none"> <li>Professional Engineer – Arizona (Electrical)</li> <li>Professional Engineer – Minnesota (Electrical)</li> <li>Professional Engineer – New Mexico (Electrical)</li> <li>Professional Engineer – Nevada (Electrical)</li> <li>Registered Communications Dist. Designer</li> </ul>	
g. OTHER PROFESSIONAL QUALIFICATIONS (Organizations, Awards, etc.) <ul style="list-style-type: none"> <li>LEED Accredited Professional</li> <li>Building Industry Consulting Services International</li> <li>National Council of Examiners For Engineering and Surveying</li> </ul>			

**H. RELEVANT PROJECTS**

1.	(1) TITLE AND LOCATION (City and State) <b>Papago Park Readiness Center, Arizona ARNG (ADOA Contract)</b> <b>Phoenix, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2012	Construction (if applicable) 2014
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Electrical engineer for the 62,000 SF Readiness Center Design-Build project for the Arizona Army National Guard that was awarded through a previous ADOA contract. Facility features include private and open office administrative spaces; a Sensitive Compartmented Information Facility (SCIF) with raised access flooring; an assembly area; simulator training space; classrooms; individual and group equipment storage; a secure arms vault; and restroom/locker room support spaces. The facility was designed to meet (& did achieve) the USGBC LEED® Gold certification requirements. Schweitzer was responsible for construction drawings and specifications for both electrical and communications.	<input checked="" type="checkbox"/>	Check if project performed with current firm
2.	(1) TITLE AND LOCATION (City and State) <b>Florence Readiness Center, Arizona ARNG (ADOA Contract)</b> <b>Florence, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2012	Construction (if applicable) 2013
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Electrical engineer for the A/E services and construction administration for the 76,710 SF Readiness Center Design-Build project for the Arizona Army National Guard that was awarded through a previous ADOA contract. Facility features include open office and private administrative spaces; assembly areas; training and education spaces; individual and group equipment storage; two storage vaults; and a vehicle maintenance shop. The facility was designed to meet (& did achieve) the USGBC LEED® Gold certification requirements. Schweitzer was responsible for the electrical and communications design of the new facilities.	<input checked="" type="checkbox"/>	Check if project performed with current firm
3.	(1) TITLE AND LOCATION (City and State) <b>Yuma MCAS MILCON P447A, Aircraft Maintenance Hangar Modifications</b> <b>Yuma, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2012	Construction (if applicable) 2013
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project manager, electrical engineer, and communication designer when Burns & McDonnell was selected to provide A/E design services for a facility modification to an existing legacy aircraft hangar. The project consisted of 52,500 SF of modifications and additions to accommodate the facility requirements of the new Joint Strike Fighter (JSF) aircraft. The facility provides a hangar bay, maintenance shops, and administrative and operations offices for the JSF Mission at MCAS Yuma.	<input checked="" type="checkbox"/>	Check if project performed with current firm



**ATTACHMENT I – General Qualifications**  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:**  
**ADSP016-00005912**

**STATE PROCUREMENT OFFICE**  
**Department of Administration**  
**100 North 15<sup>th</sup> Avenue, Suite 201**  
**Phoenix, Arizona 85007**

The facility was designed to meet (& did achieve) the USGBC LEED® Gold certification requirements.

(1) TITLE AND LOCATION ( <i>City and State</i> ) <b>Yuma MCAS MILCON P460, JSF Aircraft Maintenance Hangar Modifications</b> <b>Yuma, Arizona</b>	(2) YEAR COMPLETED	
	Professional Services 2012	Construction (if applicable) 2013

4.

(3) BRIEF DESCRIPTION (*Brief scope, size, cost, etc.*) AND SPECIFIC ROLE  
 Project manager, electrical engineer, and communication designer when Burns & McDonnell was selected to provide A/E design services for a 52,500 Joint Strike Fighter (JSF) aircraft hangar. The facility provides a hangar bay, maintenance shops, and administrative and operations offices for two additional JSF fleet squadrons to be assigned at MCAS Yuma. The facility was designed to meet (& did achieve) the USGBC LEED® Gold certification requirements.

Check if project performed with current firm

(1) TITLE AND LOCATION ( <i>City and State</i> ) <b>Yuma MCAS MILCON P583, Communications Infrastructure Upgrade</b> <b>Yuma, Arizona</b>	(2) YEAR COMPLETED	
	Professional Services 2011	Construction (if applicable) 2013

5.

(3) BRIEF DESCRIPTION (*Brief scope, size, cost, etc.*) AND SPECIFIC ROLE  
 Provided electrical communication design support when Burns & McDonnell was selected to provide A/E design services for a 38,700 Communication Squadron Support Facility. The facility provides a secure facility, housing the operations functions of the Communications Squadron and server equipment, to support the proposed Joint Strike Fighter installation at MCAS Yuma. The facility also houses fiber and copper cable connections and distributions to telephone, NIPR, and SIPR networks along with the administrative and technical services necessary to support them. The design of the communications outside plant fiber and copper infrastructure throughout MCAS Yuma included over 8 miles of new ductbanks, over 90 new manholes, new handholes, new single mode fiber optic cables, new multi-pair copper cables, and supporting devices. The facility was designed to meet (& did achieve) the USGBC LEED® Silver certification requirements.

Check if project performed with current firm



**ATTACHMENT I – General Qualifications**  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:**  
**ADSP016-00005912**

**STATE PROCUREMENT OFFICE**  
**Department of Administration**  
**100 North 15<sup>th</sup> Avenue, Suite 201**  
**Phoenix, Arizona 85007**

**4. Resumes of Key Personnel Proposed for this Contract** (Complete one Section 4 for each key person.)

a. NAME <b>Ken Ekström, PE</b>	b. ROLE IN THIS CONTRACT <b>Renewables Specialist</b>	c. YEARS EXPERIENCE	
		1. TOTAL <b>32</b>	2. WITH CURRENT FIRM <b>5</b>
d. LOCATION (City and State) <b>Phoenix, Arizona</b>			
e. EDUCATION (DEGREE AND SPECIALIZATION) <ul style="list-style-type: none"> <li>Bachelor of Science in Engineering and Applied Science – California Institute of Technology, 1978</li> </ul>		f. PROFESSIONAL TRAINING - REGISTRATIONS <ul style="list-style-type: none"> <li>Professional Engineer – Arizona (Mechanical)</li> <li>Professional Engineer – Arizona (Electrical)</li> </ul>	
g. OTHER PROFESSIONAL QUALIFICATIONS (Organizations, Awards, etc.) <ul style="list-style-type: none"> <li>NABCEP Certified Solar PV InstallerTM</li> </ul>			

**H. RELEVANT PROJECTS**

	(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
		Professional Services	Construction (if applicable)
1.	<b>Gila Bend Solar Power Plant, Arizona Public Service</b> <b>Gila Bend, Arizona</b>	2013	2014
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Provided electrical engineering services while Burns & McDonnell served as Owner's Engineer during the development and construction of the Gila Bend 32 MW solar power plant. Ekström was involved in technical review, electrical design, and project engineering.	<input checked="" type="checkbox"/>	Check if project performed with current firm
2.	<b>Solar Thermal System Integration into Existing Power Plant, Tucson Electric Power</b> <b>Tucson, Arizona</b>	2013	2014
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Assisted with the review of mechanical design and performance testing procedures of the Fresnel-lens based solar thermal addition to an existing fossil fuel power plant. Burns & McDonnell conducted preliminary design services for the client. The Compact Linear Fresnel Reflector (CLFR) technology utilizes flat mirrors to focus the sun's direct radiation on to a linear. The focal line contains piping which transports water through a system of boiler tubes, generating saturated and ultimately superheated steam for augmentation in a conventional fossil fuel power plant. A portion of the feedwater from the fossil fuel power plant is extracted and transported to the solar steam generator. The solar steam generator is arranged north to south tracking the sun and concentrating solar radiation onto a linear receiver consisting of transparent boiler tubes. Water passing through the heated tubes is turned to steam and exits the solar steam generator superheated. The steam is then piped to the power plant and injected into the cold reheat steam system. This solar thermal integration displaces a portion of the fossil fuel used in combustion.	<input checked="" type="checkbox"/>	Check if project performed with current firm
3.	<b>Mesquite Solar West, Sempra Generation</b> <b>Maricopa County, Arizona</b>	2012	2013
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Mechanical engineer while Burns & McDonnell acted as Owner's Engineer developing Sempra Energy's Mesquite 170 MW photovoltaic (PV) power plant in western Arizona. The project utilized Suntech's new Pluto PV technology and liquid cooled inverters and energy modeling with PVSyst.	<input checked="" type="checkbox"/>	Check if project performed with current firm



**ATTACHMENT I – General Qualifications**

**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912**

**STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007**

4.	(1) TITLE AND LOCATION ( <i>City and State</i> ) <b>Sun Valley North Solar Project, Capital Power Maricopa County, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2015	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION ( <i>Brief scope, size, cost, etc.</i> ) AND SPECIFIC ROLE Mechanical engineer for this 3.3-square mile, 200 MW solar energy (PV) project. As Owner's Engineer, Burns & McDonnell provided preliminary project designs and conceptual system layouts incorporating multiple solar technologies for the project. In preparation for the completion of the SUP permit application, Burns & McDonnell also provided preliminary design and evaluations of multiple drainage schemes for evaluation and an ultimate selection for inclusion in the SUP application package along with a comprehensive drainage report.	<input checked="" type="checkbox"/>	Check if project performed with current firm
5.	(1) TITLE AND LOCATION ( <i>City and State</i> ) <b>Agua Caliente Photovoltaic Power Plant, NRG Dateland, Arizona</b>	(2) YEAR COMPLETED	
		Professional Services 2012	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION ( <i>Brief scope, size, cost, etc.</i> ) AND SPECIFIC ROLE Lead investigator and primary author of a due-diligence study for the client prior to their purchase of the project. The due-diligence study included review and fatal flaw analyses of energy output projections, technology assessment, overall design, civil site design, electrical code compliance, interconnection studies, power purchasing agreements, equipment specifications, and key contract exhibits. The purpose of the due diligence evaluation was to determine if any fatal flaws existed that could potentially delay or preclude the successful development of the project.	<input checked="" type="checkbox"/>	Check if project performed with current firm



**ATTACHMENT I – General Qualifications**  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:**  
**ADSP016-00005912**

**STATE PROCUREMENT OFFICE**  
**Department of Administration**  
**100 North 15<sup>th</sup> Avenue, Suite 201**  
**Phoenix, Arizona 85007**

**4. Resumes of Key Personnel Proposed for this Contract** (Complete one Section 4 for each key person.)

a. NAME <b>Ryan Sweetwood, CPSS</b>	b. ROLE IN THIS CONTRACT <b>Environmental Scientist</b> <i>(Additional Resource)</i>	c. YEARS EXPERIENCE	
		1. TOTAL <b>10</b>	2. WITH CURRENT FIRM <b>4</b>
d. LOCATION (City and State) <b>Phoenix, Arizona</b>			
e. EDUCATION (DEGREE AND SPECIALIZATION) <ul style="list-style-type: none"> <li>BS and MS, Environmental Soil Science</li> </ul>		f. PROFESSIONAL TRAINING - REGISTRATIONS <ul style="list-style-type: none"> <li>Certified Professional Soil Scientist</li> </ul>	
g. OTHER PROFESSIONAL QUALIFICATIONS (Organizations, Awards, etc.) N/A			

**H. RELEVANT PROJECTS**

1.	(1) TITLE AND LOCATION (City and State) <b>Ocotillo Power Plant Decommissioning</b> <b>Tempe, Arizona</b>	(1) YEAR COMPLETED	
		Professional Services 2014	Construction (if applicable) 2015
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project manager on this project involving the development of decommissioning bid specifications and the management of demolition related activities for bulk fuel tank and associated piping. Activities include permitting, chemical handling, hazardous and universal waste management, asbestos abatement, facility deconstruction, and final restoration.	<input checked="" type="checkbox"/> Check if project performed with current firm	
2.	(1) TITLE AND LOCATION (City and State) <b>West Phoenix Power Plant Decommissioning</b> <b>Phoenix, Arizona</b>	(1) YEAR COMPLETED	
		Professional Services 2015	Construction (if applicable) 2016
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project manager on this project involving the development of decommissioning bid specifications and the management of demolition related activities for fuel oil, and diesel power plant. The types of facilities include bulk fuel piping, water treatment facilities, steam plants, silos and exhaust stacks, auxiliary facilities, and other power plant facilities. Activities during demolition include permitting, chemical handling, hazardous and universal waste management, subsurface investigations, remediation, asbestos and contaminated soil abatement, facility deconstruction, and final restoration.	<input checked="" type="checkbox"/> Check if project performed with current firm	
3.	(1) TITLE AND LOCATION (City and State) <b>West Phoenix Power Plant SPCC Plan Update</b> <b>Phoenix, Arizona</b>	(0.25) YEAR COMPLETED	
		Professional Services 2015	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project manager on this project involving the inspection of the facility and update of the Plant's SPCC plan.	<input checked="" type="checkbox"/> Check if project performed with current firm	
4.	(1) TITLE AND LOCATION (City and State) <b>West Phoenix Power Plant Soil Sampling and Abatement Supervision</b> <b>Phoenix, Arizona</b>	(0.5) YEAR COMPLETED	
		Professional Services 2015	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project manager preparing a PCB and VOC sampling plan, management and execution of plan, and supervision of asbestos abatement activities.	<input checked="" type="checkbox"/> Check if project performed with current firm	



ATTACHMENT I – General Qualifications

ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912

STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007

5.	(1) TITLE AND LOCATION ( <i>City and State</i> ) <b>Saguaro Power Plant Decommissioning</b> <b>Red Rock, Arizona</b>	(1) YEAR COMPLETED	
		Professional Services 2015	Construction (if applicable) NA
	(3) BRIEF DESCRIPTION ( <i>Brief scope, size, cost, etc.</i> ) AND SPECIFIC ROLE Project manager on this project involving the development of decommissioning bid specifications for a power plant. The types of facilities include bulk fuel tank and associated piping, water treatment facilities, ponds, steam plants, solar facility, silos and exhaust stacks, auxiliary facilities, and other power plant facilities. Activities planned in specifications include permitting, chemical handling, hazardous and universal waste management, subsurface investigations, remediation, asbestos and contaminated soil abatement, facility deconstruction, and final restoration.	<input checked="" type="checkbox"/> Check if project performed with current firm	



**ATTACHMENT I – General Qualifications**

**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912**

**STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007**

**4. Resumes of Key Personnel Proposed for this Contract** *(Complete one Section #4 for each key person.)*

a. NAME <b>TC Kho, RA, LEED AP</b>	b. ROLE IN THIS CONTRACT <b>Project Manager (Additional Resource)</b>	c. YEARS EXPERIENCE	
		1. TOTAL <b>27</b>	2. WITH CURRENT FIRM <b>1</b>
d. LOCATION <i>(City and State)</i> <b>Phoenix, Arizona</b>			
e. EDUCATION <i>(DEGREE AND SPECIALIZATION)</i> <ul style="list-style-type: none"> <li>BS, Architecture, University of Arizona</li> </ul>		f. PROFESSIONAL TRAINING - REGISTRATIONS <ul style="list-style-type: none"> <li>Registered Architect – Arizona</li> <li>Registered Architect – Nevada</li> </ul>	
g. OTHER PROFESSIONAL QUALIFICATIONS <i>(Organizations, Awards, etc.)</i> <ul style="list-style-type: none"> <li>LEED Accredited Professional</li> <li>ETA-I Photovoltaics (PV) Level 1 Certification</li> <li>Certified Sustainable Building Advisor</li> </ul>			

**H. RELEVANT PROJECTS**

1.	(1) TITLE AND LOCATION <i>(City and State)</i> <b>American Airlines Rebranding Phoenix Sky Harbor International Airport, Phoenix, Arizona</b>	(2) YEAR COMPLETED 2015	
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Project manager for 22 airports located in various western states of USA, Canada and Asia, including Phoenix Sky Harbor International Airport in Phoenix, Arizona. The scope of work includes surveying and design implementation to replace all millwork and signage with AA New Next Gen Standards to consolidate Legacy American Airlines and Legacy US Airways as a single new identity, American.	Professional Services 2015	Construction (if applicable) Ongoing
2.		(1) TITLE AND LOCATION <i>(City and State)</i> <b>Phoenix Sky Harbor International Airport T-3 Interior Renovation Phoenix, Arizona</b>	(2) YEAR COMPLETED 1998
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Served on project management team on a 50,000 SF, \$6M interior renovation of retail spaces. The project was phased to insure uninterrupted continued operations and required off hours construction administration services. The scope included developing a mix of potential retail vendors who would provide the optimal mix of passenger needs and maximize airport revenues. Signage and advertisement opportunities were also studied for a subsequent RFP.	Professional Services 1998	Construction (if applicable) 1998
3.	(1) TITLE AND LOCATION <i>(City and State)</i> <b>Phoenix Sky Harbor International Airport T-4, N1 Concourse TI Phoenix, Arizona</b>	(2) YEAR COMPLETED 1999	
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Served on project management team on a 35,000 SF interior fit-out for a new north airside concourse including, hold-rooms, offices, retail, airline VIP clubs, restrooms and loading bridge configurations. The scope included 24-hour construction administration mirroring the three shift construction schedule.	Professional Services 1999	Construction (if applicable) 1999
4.	(1) TITLE AND LOCATION <i>(City and State)</i> <b>US Airports Passenger Check Point Screening Project for the United States Department of Transportation, Transportation Security Administration (TSA) Langley, Virginia</b>	(2) YEAR COMPLETED 2003-2009	
		Professional Services 2003-2009	Construction (if applicable) 2003-2009



ATTACHMENT I – General Qualifications

ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912

STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007

(3) BRIEF DESCRIPTION (*Brief scope, size, cost, etc.*) AND SPECIFIC ROLE

Project manager in implementing federally mandated security issues to implement full optimization at Passenger Checkpoint area in all commercial airports located in the United States and its territories; the design utilizes WBI (Whole Body Imaging) and various advance technology (AT) carry-on baggage X-raying machines. National contract with TSA as a subcontractor to Boeing to implement 100% checked baggage screening in approximately 150 airports located in the Pacific Northwest and Alaska. Design utilizes Explosive Detection Systems (EDS) and Explosive Trace Detection (ETD) technologies.

Check if project performed with current firm

(1) TITLE AND LOCATION (*City and State*)

**American Airlines (Formerly US Airways/America West Airlines)**  
**Tempe, AZ**

(2) YEAR COMPLETED

Professional Services  
1998-2003

Construction (if applicable)  
1998-2003

5. (3) BRIEF DESCRIPTION (*Brief scope, size, cost, etc.*) AND SPECIFIC ROLE

Project architect to implement Field Station - Providing supporting facilities for airline operation. Facilities consist of Ticketing Agent Office, Operations Center, Baggage Services, Line Maintenance, Ticketing Counters/Gate Podiums and Curbside Podiums at 20 plus airports nationwide.

Check if project performed with current firm



**ATTACHMENT I – General Qualifications**  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:**  
**ADSP016-00005912**

**STATE PROCUREMENT OFFICE**  
**Department of Administration**  
**100 North 15<sup>th</sup> Avenue, Suite 201**  
**Phoenix, Arizona 85007**

**4. Resumes of Key Personnel Proposed for this Contract** *(Complete one Section #4 for each key person.)*

a. NAME <b>Scott Pasternak</b>	b. ROLE IN THIS CONTRACT <b>Resources Recovery / Recycling and Solid Waste (Incineration/Landfill) Project Manager (Additional Resource)</b>	c. YEARS EXPERIENCE	
		1. TOTAL <b>20</b>	2. WITH CURRENT FIRM <b>2</b>
d. LOCATION <i>(City and State)</i> <b>Austin, Texas</b>			
e. EDUCATION <i>(DEGREE AND SPECIALIZATION)</i>		f. PROFESSIONAL TRAINING – REGISTRATIONS	
<ul style="list-style-type: none"> <li>BA, Government with Honors, University of Texas at Austin</li> <li>MS, Community and Regional Planning, University of Texas at Austin</li> </ul>		<ul style="list-style-type: none"> <li>N/A</li> </ul>	
g. OTHER PROFESSIONAL QUALIFICATIONS <i>(Organizations, Awards, etc.)</i>			
<ul style="list-style-type: none"> <li>Solid Waste Association of North America, Planning and Management Division Vice Director</li> </ul>			

**H. RELEVANT PROJECTS**

	(1) TITLE AND LOCATION <i>(City and State)</i>	(2) YEAR COMPLETED	
	1.	<b>Residential Solid Waste and Recycling Feasibility Study</b> <b>City of Sedona, Arizona</b>	Professional Services Ongoing
(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Project manager to evaluate options for the City of Sedona to provide solid waste and recycling services via a city-wide contract. Based on initial city council decision, project may include the procurement of contracted services.		<input checked="" type="checkbox"/> Check if project performed with current firm	
2.	<b>Solid Waste and Recycling Cost of Service and Rate Study</b> <b>City of Tempe Arizona</b>	Professional Services 2015	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Managed solid waste and recycling cost of service and rate study for the City of Tempe to evaluate the cost for key services and to adopt rate increases needed to sustain the financial viability of the residential and commercial system.	<input checked="" type="checkbox"/> Check if project performed with current firm	
3.	<b>Solid Waste and Recycling Procurement</b> <b>Cities of Mesa and Tempe and Town of Gilbert</b>	Professional Services 2012	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Managed a coordinated solid waste disposal, recycling processing and green waste processing procurement. Project included feasibility analysis, developing an RFP, evaluating proposals and conducting contract negotiations.	<input checked="" type="checkbox"/> Check if project performed with current firm	
4.	<b>Strategic Plan to Achieve 40% Recycling Rate</b> <b>City of Phoenix, Arizona</b>	Professional Services 2013	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Project manager on the project to help achieve a 40 percent recycling rate, evaluated the financial, operational and technical feasibility of multiple options. Led financial and operational evaluations and advised senior management and City Council on viable options. City implemented key recommendations, such as organics collection and pay-as-you-throw.	<input type="checkbox"/> Check if project performed with current firm	



ATTACHMENT I – General Qualifications

ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912

STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007

5.	<p>(1) TITLE AND LOCATION (<i>City and State</i>) <b>Multiple Solid Waste and Recycling Studies</b> <b>City of Glendale, Arizona</b></p> <p>(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE Managed multiple solid waste and recycling studies for the City of Glendale from 2003-2010. Projects included cost of service and operations review (2003), cost of service updates (2005, 2007, 2010), landfill valuation (2005).</p>	<p>(2) YEAR COMPLETED</p> <table border="1"> <tr> <td data-bbox="938 499 1235 554">Professional Services 2010</td> <td data-bbox="1235 499 1477 554">Construction (if applicable) N/A</td> </tr> </table> <p><input type="checkbox"/> Check if project performed with current firm</p>	Professional Services 2010	Construction (if applicable) N/A
Professional Services 2010	Construction (if applicable) N/A			



**ATTACHMENT I – General Qualifications**  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:**  
**ADSP016-00005912**

**STATE PROCUREMENT OFFICE**  
**Department of Administration**  
**100 North 15<sup>th</sup> Avenue, Suite 201**  
**Phoenix, Arizona 85007**

**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>Papago Park Readiness Center (ADOA Contract)</b> <b>Phoenix, Arizona</b>	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES <b>2012</b>	CONSTRUCTION <i>(If applicable)</i> <b>2014</b>

**23. PROJECT OWNER'S INFORMATION**

c. PROJECT OWNER <b>Arizona Army National Guard</b>	d. ORIGINAL BUDGET/NTE AMOUNT OF PROJECT <b>\$16.3 Million</b>	e. TOTAL COST OF PROJECT <b>\$16.3 Million</b>
--	---	---

f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

**Project Summary:** This project is a companion facility to the Papago I Readiness Center that Burns & McDonnell designed and completed in 2010. Procured under ADOA guidelines and executed under the ADOA Design-Build contract, Burns & McDonnell served as Designer of Record for this new Design-Build 62,000 SF Readiness Center, in support of the Arizona Army National Guard's 158th Maneuver Enhancement Brigade (MEB). Burns & McDonnell was responsible for all design development and charrettes; design review meetings with the owner and contract document drawings and specifications; submittal and shop drawing review; periodic site inspection; RFI review; and punchlist and closeout activities.

**Design Requirements:** Burns & McDonnell collaborated with the Guard to revise the floor plan and re-site the building. Our knowledge of the end-users' criteria allowed us to provide a much more functional facility with consideration for future growth and changing mission requirements.

The facility includes the State's Emergency Operations Command Center. This center is highly secure and is designed to withstand natural disasters with redundant power that will keep it operating so that state agencies and public safety can operate to execute emergency response plans and deploy emergency resources. open office and private administrative spaces; classrooms; combat simulation room; assembly hall; secure communications space; secure arms vault; kitchen; private and unit gear storage areas; locker and shower areas; training and education spaces; individual and group equipment storage; and a weapons vault. The new facility also has approximately 2000 SF SCIF meeting all ICD/ICS 705 standards.



**Figure 1. Papago Readiness Center.** The facility includes the State's Emergency Operations Command Center, which is highly secured and designed to withstand natural disasters so state agencies and public safety can operate emergency response plans and deploy emergency resources.

**Site Development:** Sitework included clearing & site preparation, roadways, access roads, parking areas, walkways, and utilities. Flexible pavement is used for the roadways and permanent parking areas. Supporting facilities include military and private vehicle parking areas; security fencing and lighting; anti-terrorism force protection measures; and a telecommunications system incorporating Mass Notification in accordance with AT/FP criteria. Burns & McDonnell designed the project to meet all requirements of UFC 4-010-01, Antiterrorism Standards for Buildings, including site standoff distances and blast resistant window assemblies.

**Sustainable Design:** The facility is designed to follow Arizona Executive Order 2005-05 for energy-efficient buildings. The facility achieved USGBC LEED® Gold certification and provides cost effective energy conserving mechanical and electrical equipment, pre-wired workstations and an emergency power generator back-up. An on-site renewable photovoltaic system is estimated to generate 60,000 kwh of electricity, exceeding the State of Arizona Executive Order 2005-05 requirement to provide at least 10% of energy from a renewable resource.



Energy savings are projected at a 40% improvement over the ASHRAE 90.1-2007 baseline. Water



ATTACHMENT I – General Qualifications

ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912

STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007

efficiency sustainable features include using established landscaping, eliminating the need for a permanent irrigation system. Water savings are projected to exceed 50% over baseline calculations.

Strategies to promote good indoor air quality include a no smoking policy and outside air ventilation rates above ASHRAE 62.1-2007 minimums with automatic controls and reduction of indoor pollutants. IAQ management during construction and before occupancy reduced air quality problems resulting from the construction process. Pollutant source control, increased air filtration, and the use of low-emitting adhesives, sealants, paints, coatings, flooring, carpeting and composite wood products contribute to a healthier indoor environment. Occupant comfort is maintained through efficient system design and verification, with the greatest number of individual temperature controls possible. Natural daylighting reduces lighting loads and improve the interior environment, and task lighting at the workstation controls allows light levels based on individual needs.

**Budget Adherence:** As design progressed from concept to interim and then to final, Burns & McDonnell worked closely with the Design-Build Contractor and subcontractors to maintain design and costs within budget. These efforts included a selection of cost effective, durable materials for the facility and working with local and county officials on utility and road construction requirements.

**Building Information Modeling (BIM):** The design team utilized BIM tools such as Autodesk Revit and Navisworks to integrate individual discipline design models for near real-time coordination between the design team, the Design-Build Contractor and subcontractors.



**Figure 2. Papago Readiness Center.** Procured under ADOA guidelines and executed under the ADOA Design-Build contract, Burns & McDonnell served as Designer of Record for this new Design-Build 62,000 SF Readiness Center, in support of the Arizona Army National Guard's 158th Maneuver Enhancement Brigade (MEB). Project construction was completed in February 2014.



ATTACHMENT I – General Qualifications

ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912

STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007

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>Florence Readiness Center (ADOA Contract)</b> <b>Phoenix, Arizona</b>	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES <b>2012</b>	CONSTRUCTION <i>(If applicable)</i> <b>2013</b>

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER <b>Arizona Army National Guard</b>	d. ORIGINAL BUDGET/NTE AMOUNT OF PROJECT <b>\$15.2 Million</b>	e. TOTAL COST OF PROJECT <b>\$15.2 Million</b>
--	---	---

f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

**Project Summary:** As Designer of Record under an ADOA Design-Build contract, Burns & McDonnell provided architecture, electrical, mechanical, structural, and civil engineering services and construction support for this new Design-Build 76,710 SF Readiness Center, in support of the Arizona Army National Guard. The facility includes open office and private administrative spaces; assembly areas; training and education spaces; individual and group equipment storage; a vehicle maintenance shop; and a weapons vault. Construction consisted of a structural steel frame with decorative concrete block façade; sealed and stained concrete floors; and a combination of standing seam metal and membrane roofing systems. Building systems were designed to include life-cycle-cost effective energy conservation; mechanical and electrical equipment; pre-wired work stations; and an emergency back-up power generator. Supporting facilities include military and private vehicle parking areas; security fencing and lighting; anti-terrorism force protection measures; and a telecommunications system incorporating mass notification in accordance with AT/FP criteria.

Burns & McDonnell designed the project to meet all requirements of UFC 4-010-01, Antiterrorism Standards for Buildings, including site standoff distances and blast resistant window assemblies.

**Sustainable Design:** The project was designed following the Arizona Executive Order 2005-05 and USGBC LEED® for new construction. The project achieved USGBC LEED® Gold certification and received mention in AZRE magazine's May-June 2014 issue. Because of the incorporation of PV and low energy usage strategies for lighting as well as programming the facility efficiently, this facility is net-zero in terms of energy consumption for full-time staff. As a part of the LEED® certification process, the facility underwent enhanced commissioning by a third-party provider, to ensure that all building systems were operating optimally. During construction, measures were taken to protect and relocate the native Saguaro cactus on the site, helping maximize water efficient landscaping and eliminate reliance on potable water for irrigation purposes. Potable water use is further reduced through the use of low-flow plumbing fixtures throughout the facility.



**Figure 3. Florence Readiness Center.** The 40-piece gym was designed and incorporated for staff use onsite, to accommodate and encourage a healthy lifestyle while working long hours.

Significant energy saving measures were also been incorporated into the facility design. These measures include: EAct energy reduction of 42.7%; energy cost savings of 32.1%, equating to 11 LEED® credit points; and on-site energy production of 16.5%, which equates to 7 LEED® credit points. These reductions are accomplished through the use of high efficiency HVAC and electrical equipment, increased building thermal performance, and photovoltaic electrical power production.





ATTACHMENT I – General Qualifications

ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSPO16-00005912

STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007



**Figure 4. Florence Readiness Center.** As Designer of Record under an ADOA Design-Build contract, Burns & McDonnell provided architecture, electrical, mechanical, structural, and civil engineering services, as well as construction support for this new Design-Build 76,710 SF Readiness Center, in support of the Arizona Army National Guard. Construction of the facility was completed in 2013.

*"The Design-Build team of Haydon Building Corp (builder) and Burns & McDonnell (A&E) was a pleasure to work with from contract award, through the design charrette, design reviews, and during construction. They partnered with the National Guard to produce two outstanding Readiness Centers that will meet our Soldier's training and support requirements for generations. Their performance of these projects was an ideal text book example of the DB team partnering with the Owner to produce a superior product that met all our performance specifications."*

- Tibor Lanczy  
CFMO MILCON Support Tm Ldr  
J.G. Management Systems



**ATTACHMENT I – General Qualifications**  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:**  
**ADSP016-00005912**

**STATE PROCUREMENT OFFICE**  
**Department of Administration**  
**100 North 15<sup>th</sup> Avenue, Suite 201**  
**Phoenix, Arizona 85007**

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

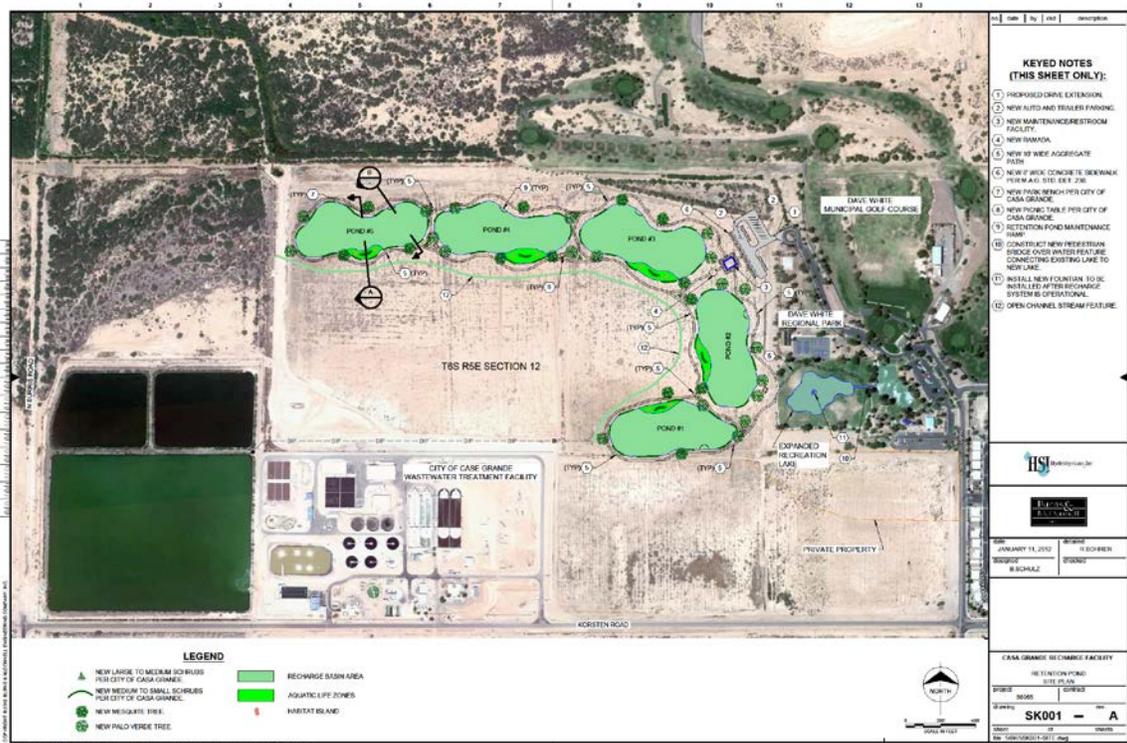
*(Present no more than five (5) projects. Complete one Section 5 for each project.)*

a. TITLE AND LOCATION <i>(City and State)</i> <b>Reclaimed Water Recharge Reservoirs &amp; Park</b> <b>Casa Grande, Arizona</b>		b. YEAR COMPLETED	
		PROFESSIONAL SERVICES <b>2012</b>	CONSTRUCTION <i>(If applicable)</i> <b>2012</b>
<b>23. PROJECT OWNER'S INFORMATION</b>			
c. PROJECT OWNER <b>City of Casa Grande</b>	d. ORIGINAL BUDGET/NTE AMOUNT OF PROJECT <b>\$3 Million</b>	e. TOTAL COST OF PROJECT <b>\$3 Million</b>	

f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

**Project Summary:** Burns & McDonnell performed engineering services for the City of Casa Grande to develop, design and construct a series of basins that serves as a recharge facility and a public park. Our civil engineers worked with the existing topography and designed the location of the basins so that there could be large open spaces for the public to use. We also incorporated a series of wide walking paths throughout the area. Benches and native landscaping enhance the park. We connected it to an existing park so that the public has easy access. The primary purpose for the basins is to recharge the reclaimed water coming from the City's water reclamation facility. This valuable resource will recharge into the local aquifer where it can be withdrawn at some later date for beneficial reuse.

**Services Provided:** Studies, Preliminary Design, Detailed Design, Bidding Assistance, Construction Inspection, Special Inspections, Site Development, Permitting, and Public Participation.



**Figure 5. Reclaimed Water Recharge Reservoirs & Park Layout.**  
 The Reclaimed Water Recharge Reservoirs and Park is connected to an existing city park providing access to the public.



ATTACHMENT I – General Qualifications

ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912

STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007

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>Ocotillo Power Plant Drainage Master Plan Tempe, Arizona</b>	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES <b>2014</b>	CONSTRUCTION <i>(If applicable)</i> <b>N/A</b>

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER <b>Arizona Public Service</b>	d. ORIGINAL BUDGET/NTE AMOUNT OF PROJECT <b>\$125,000 (design)</b>	e. TOTAL COST OF PROJECT <b>N/A</b>
---	---	--

f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

Burns & McDonnell is currently working as Owner's Engineer to support Arizona Public Service (APS) for an Engineer Procure Construct (EPC) project to modernize the power production at the Ocotillo Power Plant. In support of this project Burns & McDonnell is creating a Drainage Master Plan to support the project and future development of the installation. The project includes preliminary development planning with the City of Tempe as well as a Master Grading and Drainage Report.

**Preliminary Development Planning with City of Tempe:** As part of the project, Burns & McDonnell is working with the City of Tempe to initiate the upfront planning with the city for utilities, roadway improvements, grading and drainage. Burns & McDonnell is working with the City of Tempe to identify development requirements for the EPC contractor and engage the various city departments in preliminary discussions of the project development. The project is designing a proposed fire protection loop for the facility that will connect to the City of Tempe water distribution to provide adequate fire protection for existing and future buildings. This required close coordination with the City of Tempe Water Department to identify potential connection points and typical connection requirements for a fire line connection. A new entrance with acceleration/deceleration lanes is being developed on the University Avenue side of the installation to provide access to the proposed facilities. The proposed entrance involved working with the City of Tempe Development Services Department to develop a plan that will meet city criteria and address the needs of the owner.

**Master Grading and Drainage Report:** In addition to the preliminary development documents, Burns & McDonnell is preparing a Master Grading and Drainage Report to identify drainage solutions for the future development of the Ocotillo Power Plant. The drainage report will analyze three different conditions for the installation. The current condition is analyzed to identify current drainage issues that exist on the plant. The proposed development for the modernization project will have an effect on the storm water runoff; the drainage report will propose solutions to alleviate the increase in runoff. Burns & McDonnell met with the Development Services Department to incorporate the City of Tempe storm water drainage design standards into the master plan layout. In addition to the proposed modernization development, the future development of the installation will be analyzed to create a plan for identifying required storm water projects needed for the plant to be in compliance with the storm water standards for the City of Tempe. This establishes a development plan for future projects that has been reviewed by the city. It will be a valuable document for APS in support of future improvement projects by having a clearly defined solution that has been created with input from the approving authority. It will minimize the effort required for permitting and development reviews on those future projects. The final report will include an analysis of the state of current capabilities, modernization development, future improvements, infrastructure, and supporting facilities to fully sustain future operations.



**ATTACHMENT I – General Qualifications**

**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912**

**STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007**

**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>Gila Bend Solar Power Plant</b> <b>Gila Bend, Arizona</b>	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES <b>2013</b>	CONSTRUCTION <i>(If applicable)</i> <b>2014</b>

**23. PROJECT OWNER'S INFORMATION**

c. PROJECT OWNER <b>Arizona Public Service</b>	d. ORIGINAL BUDGET/NTE AMOUNT OF PROJECT <b>\$613,000</b>	e. TOTAL COST OF PROJECT <b>\$613,000</b>
---	--	--

f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

Burns & McDonnell recently completed working as Owner's Engineer and as the APS Project Engineer in support of Arizona Public Service's 32 MW solar photovoltaic installation in Gila Bend, Arizona. Burns & McDonnell provided design review, functional and performance test protocol review, construction document review, QA/QC onsite monitoring, and commissioning support. Project Features included conventional 72-cell, polycrystalline modules and a single axis tracking system.

This was the first solar construction project for the selected EPC contractor, so Burns & McDonnell was asked to be very involved throughout construction. Therefore Burns & McDonnell provided a field engineer on-site for six months during construction. Burns & McDonnell issued weekly field reports, tracked QA/QC issues, and created punch lists to ensure that a quality project would be delivered.



**Figure 6. Gila Bend Solar Power Plant.** The Gila Bend Solar Power Plant included conventional 72-cell, polycrystalline modules and a single axis tracking system and was fully operational by July 2014.



ATTACHMENT I – General Qualifications

ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912

STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007

6. ADDITIONAL INFORMATION

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

**Burns & McDonnell Firm Information**

**Company Overview:** The Burns & McDonnell Phoenix office has been serving clients in the Valley since 1998. Our local staff includes 96 professionals who perform architecture, engineering, project controls, program management and construction management. The key market sectors served from this office are state and municipal facilities, water services including water/waste water, stormwater management and drainage, energy services including energy audits and retro-commissioning, solar technology, process and industrial, aviation, and commercial facilities.

Founded in 1898, Burns & McDonnell Engineering Company, Inc. has more than 5,300 employees and is a nationally recognized architectural, engineering and construction firm. Our core values are our integrity, safety and our commitment to making our clients successful through our technical expertise and commitment. We bring problem-solving ability and a dedication to doing what it takes to get a job done well, within our clients' budgets and time constraints. Our staff includes engineers, architects, contractors, planners, estimators, economists, technicians and scientists, representing virtually all design disciplines. We provide services to our clients in a broad cross-section of markets that touch lives in many ways, from electricity to drinking water, and from roads and airports to manufacturing facilities.

Burns & McDonnell is 100% employee-owned. This guides our behavior as each of us has a vested interest in the success of every client and every project. We act like owners and we believe that this drives us to be more engaged and more responsive than many other consultants, resulting in increased value to our clients. Our company is financially stable and our employee turnover is less than 1%, which means that we can deliver the same personnel to a project from start to finish. On many occasions, years after a project is complete, our clients rely on our employees who originally performed the work to provide historical project information, as-builts, and equipment specifications when they are considering alterations, expansions or renovations. The value we bring is recognized by our repeat clients who account for more than 80% of our business.

Regularly listed in the top 15 percent of the leading 500 design firms by the Engineering News-Record, Burns & McDonnell has been honored with numerous awards for innovation, excellence, and client service from professional organizations, government agencies and aviation clients. However, our greatest achievement is in receiving positive feedback from our clients. One example of such feedback follows, regarding our performance on the Papago I & II Park Readiness Centers, in which we performed as Designer of Record under ADOA Design-Build contracts.

*"The Burns and McDonnell team delivered exemplary services to the Arizona Army National Guard in the design and construction of two Readiness Centers. They worked as a team from day-one to deliver outstanding facilities that will serve the Soldiers of the organization for many years to come. Their team listened to owner input, met rigorous design standards, fast-tracked the construction process, and produced the projects on time and on budget; they should be very proud of their work..."*

Brigadier General John E. Burk  
Arizona National Guard  
Arizona Department of Emergency and Military Affairs





**ATTACHMENT I – General Qualifications**  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:**  
**ADSP016-00005912**

**STATE PROCUREMENT OFFICE**  
**Department of Administration**  
**100 North 15<sup>th</sup> Avenue, Suite 201**  
**Phoenix, Arizona 85007**

**Proposed Key Personnel, Additional Resource Personnel and Recent Relevant Experience:** In this statement of qualifications we identified several key personnel who will be assigned to projects arising from this ADOA Contract. The key personnel are all licensed in Arizona and have worked on all of the 5 projects that we provided. We have also provided three additional resource personnel. A matrix of the personnel and their role on each project is provided below:

KEY PERSONNEL PROJECT EXPERIENCE							
Identified personnel, role for contract, the five project each is associated with							
KEY PERSONNEL	Personnel Name	Role	1. Papago Park Readiness Center - Arizona ARRG (ADOA Contract)	2. Florence Readiness Center, Florence Military Reservation (ADOA Contract)	3. Reclaimed Water Recharge Reservoirs, Town of Casa Grande	4. Ocotillo Power Plant Drainage Master Plan, Arizona Public Service	5. Gila Bend 32 MW Solar Power Plant, Arizona Public Service
	Keith Koprowski, PE	Project Manager / Senior Civil Engineer	PM	PM		QC	
	Scott Mitchell, AIA, LEED GA	Architect	RA	RA			
	Justin Isner, PE	Civil Engineer, Site	CE	CE	CE	CE	
	Steve Peterson, PE	Mechanical Engineer / PV Design	QC	ME			QC
	Nathan Thompson, PE, CFM	Civil Engineer, Stormwater / Drainage			CE	CE	
	Jason Hope, PE	Structural Engineer	SE	SE			QC
	Andy Hornick, PE	Structural Engineer			SE		
	Bill Schweitzer, PE, RCDD/OSP, LEED AP	Electrical Engineer / Asst. Project Manager	EE	EE			
	Ken Ekstrom, PE	Renewables Specialist					EE
Ryan Sweetwood, CPSS	Environmental Scientist (Additional Resource)						
TC Kho, RA	Project Manager / Architect (Additional Resource)						
Scott Pasternak	Resources Recovery / Recycling and Solid Waste (Incineration/Landfill) Project Manager (Additional Resource)						

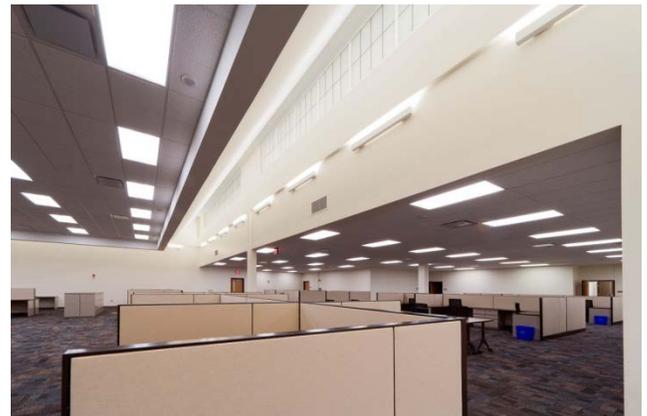
PM - Project Manager  
 RA - Registered Architect  
 CE - Civil Engineer  
 QC - Quality Control  
 ME - Mechanical Engineer  
 SE - Structural Engineer  
 EE - Electrical Engineer

**Figure 7. Key Personnel Matrix.** The key personnel who will be assigned to projects arising from this ADOA Contract are all licensed in Arizona and have worked on all of the 5 projects that we provided. We have also provided three additional resource team members.

**Experience Doing Work under the ADOA Contract:** Burns & McDonnell has done projects for the Arizona Department of Military Affairs for the past 7 years. Each of these projects were executed under the ADOA standard contract. In addition, we have performed services for ADEQ as a consultant, providing peer review services, which were executed under the ADOA standard contract.

**Experience with Arizona State Guidelines for Energy and Energy Efficiency in Buildings:** Burns & McDonnell has recent experience in designing facilities (architecture and full-engineering services) for the Arizona Department of Military Affairs that follow the Arizona State Guidelines for Energy Efficiency and the Federal Guidelines.

Our Papago Park Readiness Center (listed in section 5, project #1) achieved USGBC LEED® Gold certification because it was designed to be highly energy efficient, using 42% below baseline per ASHRAE 189 standards. This was achieved through the use of PV, low energy lighting, incorporating daylight into the design, and using high efficiency HVAC equipment.



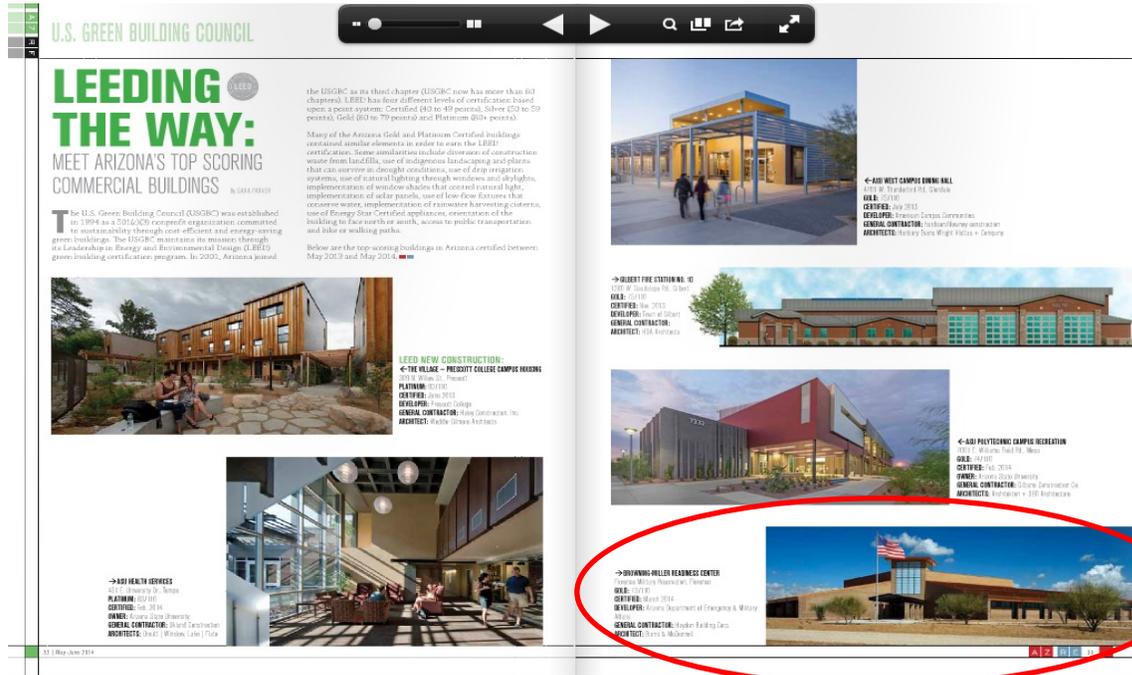
**Figure 8. Papago Readiness Center.** Natural daylight utilized in open office.



**ATTACHMENT I – General Qualifications**  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:**  
**ADSP016-00005912**

**STATE PROCUREMENT OFFICE**  
**Department of Administration**  
**100 North 15<sup>th</sup> Avenue, Suite 201**  
**Phoenix, Arizona 85007**

Burns & McDonnell's design for the Florence Readiness Center (listed in section 5, project # 2) also achieved USGBC LEED® Gold certification due to the incorporation of solar energy; the use of LED and high efficiency fluorescent lighting; energy recovery from exhaust heat; daylight with integrated photo sensors; extensive use of occupancy sensors and timers on lighting; and high efficiency HVAC equipment. Additionally, because of our innovative approach to programming the space around full-time occupants in a central area, this facility is net-zero in energy consumption for the full time occupants.



**Figure 9. Florence Readiness Center.** In recognition for the sustainable concepts, the Florence Readiness Center received a sustainability award from AZRE magazine. It was published in the May-June 2014 issue.

**Experience with LEED:** We have designed six facilities for Arizona DEMA that all have achieved LEED Certification. The most recent facilities, listed in this SOQ, are the Florence Readiness Center and Papago Readiness Center, both of which are LEED® Gold certified. We achieve this through continuous training of our personnel so that we maintain current knowledge of the following at all times: Arizona State Guidelines for Energy; Guidelines for LEED; federal mandates; executive orders; issued UFCs and ECBs; Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings; ASHRAE Standard 90.1 and ASHRAE 189.1, regarding requirements including energy efficiency; renewable energy; life-cycle cost analysis; performance measurement; water use reduction; and use of environmentally preferable and bio-based products and waste management.

We understand that integrated design with strong, consistent representation from all stake-holders throughout the project is the key to success in achieving a high-performance building and in realizing the increased savings potential while reducing the total cost of ownership. We strive for designs that balance life-cycle costs, energy efficiency, energy security, and occupant benefits within the project's budget and agency's mission.

Burns & McDonnell's approach to energy-efficiency is to first question established energy assumptions, and to improve the building envelope. We then look for "free energy" opportunities to reduce load, such as integrating artificial lighting controls with daylight photo sensors. Following that, we look for opportunities to capture waste heat for power and improve the efficiencies of all lighting, and service hot water and HVAC equipment beyond the ASHRAE/IESNA baseline standard. We then we look at feasibility to integrate renewable energy for a portion of the project's energy needs. And lastly, we employ commissioning practices, using an experienced commissioning provider, appropriate to the size and complexity of the building and its system components, in order to verify performance and ensure that the owner's project requirements are met. Building metering of energy systems further enables future ongoing performance measurement.

By using IES Virtual Environment building performance software early in design we are able to explore envelope, orientation,



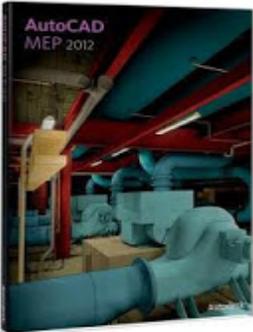
**ATTACHMENT I – General Qualifications**  
**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:**  
**ADSP016-00005912**

**STATE PROCUREMENT OFFICE**  
**Department of Administration**  
**100 North 15<sup>th</sup> Avenue, Suite 201**  
**Phoenix, Arizona 85007**

daylighting and building systems options quickly during design for relative impact on performance. Then using whole-building energy modeling software we document the energy efficiency for certification compliance once design decisions are made. At each step we evaluate initial and operational costs and benefits through life cycle cost analysis to enable informed decision-making by the owner.

Selection and design of building materials and products focuses on meeting requirements of the following: Guiding Principles; Comprehensive Procurement Guidelines; DoD Green Procurement Policy including Environmentally Preferable, Bio-Based, Energy Star and FEMP Energy Efficient Products; and Water Conserving and Recycled Products. Burns & McDonnell bases product specifications on durable, appearance-retaining products with longevity that have a reduced impact on human health and the environment, considering product life-cycle compared to competing products serving the same purpose. Our specifications direct the Contractor to optimize use of materials from within 500 miles of the project site or closer, to give preference to materials made with recycled content and to procure wood products from sustainably managed forests or from rapidly renewable resources. The results are that many of our projects have achieved over 30% recycled content materials, 30% local/regional materials and over 80% certified wood.

We design buildings to include collection and storage of recyclables for the occupants. We also write specifications to require contractors to provide a Waste Management Plan to demonstrate how they plan to achieve a minimum of 75% demolition/construction waste diversion (exceeding the 50% requirement). During construction we hold regularly scheduled calls with the contractors to discuss questions and achievement status. The contractors on most of our projects exceed the 75% diversion goal and typically achieve 80 to 95% diversion rates.



**BIM:** At Burns & McDonnell, our comprehensive BIM experience increases design collaboration and coordination for which our multi-disciplinary teams have long been known. Burns & McDonnell's experience with the use of BIM models has been recognized by Autodesk by placing the east chiller building for Thermal Energy Corporation on the cover of the AutoCAD MEP 2012 software product. In addition, integrated design tools such as Autodesk Revit are utilized across all disciplines to ensure real time model coordination as the design progresses.

**Figure 10. AutoCAD MEP 2012 Cover.** Autodesk recognized Burns & McDonnell's experience with BIM by using our BIM model on the cover of software material.

*Integrated Engineering and Design*

Burns & McDonnell leverages the building information models with our engineering analysis models such as AutoPIPE and RISA 3D. This decreases the probability of errors and enables the design team to quickly evaluate design alternatives and impact from potential design changes.

*Clash Detection*

Interdisciplinary collaboration is improved with our ability to automatically detect clashes in 3D using tools such as Navisworks.

*Rendering Visualization*

The creation of a 3D integrated building model allows Burns & McDonnell to quickly produce renderings and walkthroughs that provide our clients and partners with a deeper understanding of the facility design.

Standard BIM Software Platforms	
<b>Architectural Model</b>	Revit Architecture, Sketchup/Podium, NavisWorks
<b>Civil Model</b>	AutoDesk Civil 3D
<b>Structural Model</b>	Revit Structure, NavisWorks
<b>Plumbing Model</b>	Revit MEP, NavisWorks
<b>HVAC Model</b>	Revit MEP, NavisWorks
<b>Electrical Model</b>	Revit MEP, NavisWorks



ATTACHMENT I – General Qualifications

ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912

STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007

Building Information

Material and building system data built into the model during design enables our designers to evaluate the cost impact of changes during the design phase resulting in a value engineered process throughout, rather than only at the end of design.



Figure 11. BIM. BIM practices are currently the Burns & McDonnell standard project design authoring method used. We begin the BIM process by assigning a BIM Manager to the project who has the resources and training to ensure that a smooth BIM workflow is achieved. This person helps to facilitate coordination between disciplines and ensure BIM model integrity. All disciplines utilize BIM software.

**Quality Control:** We strive to provide the highest quality on every job we do – no matter how large or small. The quality of the services we provide on our design and construction projects is evident by the amount of repeat business that Burns & McDonnell achieves...over 80% of our business is executed with repeat clients. In order to achieve a high level of quality, we use a detailed six-step quality review process for engineering work with all project work. Our process has been developed and refined internally and has been vetted for use by our clients. The Quality Review steps include:



Figure 12. Quality Control Six-Step Process. In order to achieve a high level of quality, we use a detailed six-step quality review process for engineering work with all project work.

Q5 Review

Review of Rough Draft Specifications – Complete and accurate specifications reduce questions during the bid process and construction. During this review step, Burns & McDonnell sits with our client to review the specifications for each aspect of the design. At this stage we work with our client to develop the criteria for front-end documents to be issued to equipment suppliers or construction entities.



ATTACHMENT I – General Qualifications

ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912

STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007

#### *Q6 Review*

Review of Design and Construction Packages by internal discipline leads and management – This review step is to verify integration between disciplines and integration with legal, procurement, and construction to ensure the completeness of the issued packages. Upon acceptance at the Q6 level, the design documents are issued to the Owner for their review.

#### *Audit Program*

At the completion of each regimented quality review step, the quality review manager for the project is required to fill out a form and submit to the corporate quality review management. In essence, this procedure is a real time audit for each of the projects, ensuring that the policies and procedures established are followed for each of our assignments.

**Minority Participation:** Burns & McDonnell is committed to supporting the local community and providing opportunities for minority and small businesses. The key to success on many of our projects can be attributed to the work that our small businesses perform. We seek to mentor our small business partners and in turn find that we are often learning many valuable best practices from them, in our mutual goal of making our clients successful. Through our supplier diversity program, we have expanded our markets and provided value to our clients. On every project that we lead, we work with our clients to identify key sub-consultants that they would like us to add to the team for specialty work and to achieve minority goals for the project.

**Awards & Recognition:** We have been honored to receive a number of awards that speak to our commitment to client satisfaction and our commitment to our employees.

#### *Best Places to Work in the Valley 2015*

The Burns & McDonnell Phoenix office ranks #20 on the Phoenix Business Journal *Best Places to Work in the Valley 2015* (small office category) list. This is the third year in a row that the Phoenix office has been listed in the top 20.

#### *Professional Services Management Journal Premier Award for Client Satisfaction*

The Professional Services Management Journal (PSMJ) annually conducts a survey of A/E/C clients to determine the winners of its Premier Award for Client Satisfaction. Burns & McDonnell won this prestigious award for the sixth year in a row. We are the only Engineering News-Record magazine Top 100 Design Firm to win the award.

#### *FORTUNE 100 Best Companies to Work For*

Burns & McDonnell ranks #16 in *FORTUNE's 2015 list of 100 Best Companies to Work For*. This is the fourth consecutive time the firm has made the list. This national recognition places Burns & McDonnell in a class well above its competitors.

#### **Reasons for selecting Burns & McDonnell:**

- Our Team has recent and relevant **demonstrated experience** on ADOA state contracted projects.
- We provide **exceptional qualifications** and a team of outstanding professionals; all registered in Arizona.
- Our firm of more than 5,300 professionals provides the **assured capacity** to perform on any size project.



ATTACHMENT I – General Qualifications

ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:  
ADSP016-00005912

STATE PROCUREMENT OFFICE  
Department of Administration  
100 North 15<sup>th</sup> Avenue, Suite 201  
Phoenix, Arizona 85007

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:	30%
b. Percentage of Total Work Attributable to Non-Government Work:	70%

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

Signature: Tanya Martella

Date: December 19, 2015

Name: Ms. Tanya Martella

Title: Associate