



ATTACHMENT I – General Qualifications
ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:
ADSPO15-00004729

STATE PROCUREMENT OFFICE
Department of Administration
100 North 15th 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:	KC MECHANICAL ENGINEERING
b. FIRM (OR BRANCH OFFICE) STREET:	5447 EAST FIFTH STREET #112
c. FIRM (OR BRANCH OFFICE) CITY:	TUCSON
d. FIRM (OR BRANCH OFFICE) STATE:	ARIZONA
e. FIRM (OR BRANCH OFFICE) ZIP CODE:	85712
f. YEAR ESTABLISHED:	1986
(g1). OWNERSHIP - TYPE:	S-CORP
(g2). OWNERSHIP - SMALL BUSINESS STATUS:	SBE CERTIFIED #541330
h. POINT OF CONTACT NAME AND TITLE:	KENNETH M. CAWTHORNE
i. POINT OF CONTACT TELEPHONE NUMBER:	520/327-7611
j. POINT OF CONTACT E-MAIL ADDRESS:	kenc@kcmech.net
k. NAME OF FIRM (If block 1a is a branch office):	



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2. EMPLOYEES BY DISCIPLINE

a. Discipline Title	b. Function: Primary (P) or Secondary (S)	c. No. of Employees - Firm	d. No. of Employees - Branch
MECHANICAL ENGINEER	P	6	
PROJECT MANAGER	P	3	
CADD TECHNICIAN	P	2	
ADMINISTRATION	P	1	
Total		12	



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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)
5	ACTIVITY CENTERS	1
2	AIRPORTS - TERMINALS/HANGARS	1
7	AUDITORIUMS/THEATERS	1
5	ANIMAL FACILITIES	1
50	COMMERCIAL BLDGS – LOW RISE, SHOPPING CENTERS	3
20	DINING HALLS, CLUBS, RESTAURANTS	2
15	EDCUATIONAL FACILITIES, CLASSROOMS	3
31	HOSPITALS, MEDICAL FACILITIES	3
5	HOTELS, MOTELS	2
15	HOUSING	2
10	INDUSTRIAL BUILDINGS	2
2	JUDICIAL, COURTROOM FACILITIES	1
1	MUSEUMS	1
15	OFFICE BUILDINGS	1
2	WAREHOUSES	1

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

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



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

a. NAME Kenneth M. Cawthorne	b. ROLE IN THIS CONTRACT Principal Engineer	c. YEARS EXPERIENCE	
		1. TOTAL 28 years	2. WITH CURRENT FIRM 20 years, since 1994
d. LOCATION (City and State) Tucson, Arizona			
e. EDUCATION (DEGREE AND SPECIALIZATION) BS Mechanical Engineering, University of Arizona 1986		f. PROFESSIONAL TRAINING - REGISTRATIONS US Green Building Council LEED Accredited Professional - Arizona Registration #25035 Colorado Registration #36925 Nevada Registration #020538 New Mexico Registration #13143 Texas Registration #104235	
g. OTHER PROFESSIONAL QUALIFICATIONS (Organizations, Awards, etc.) ASHRAE – Associate Member ASPE – Associate Member ASHE – Associate Member ICC – Professional Member			

H. RELEVANT PROJECTS

1.	(1) TITLE AND LOCATION (City and State) UNIVERSITY OF ARIZONA MCKALE CENTER RENOVATIONS Tucson, Arizona	(2) YEAR COMPLETED
		Professional Services 2014 Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Principal Mechanical Engineer for the mechanical and plumbing upgrades and renovations for this initial \$30 million phase of construction that included all new locker rooms for Men's & Women's basketball, volleyball, swimming, baseball/softball, and coaches along with all new concourse level concessions and public toilet rooms that were expanded to provide 4 times the existing capacity.	<input checked="" type="checkbox"/> Check if project performed with current firm
2.	(1) TITLE AND LOCATION (City and State) GSA TUCSON FEDERAL BUILDING RESTROOM RENOVATIONS Tucson, Arizona	(2) YEAR COMPLETED
		Professional Services 2013 Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Lead Mechanical Engineer - Provided the initial investigation of existing conditions and then construction documents to replace all existing plumbing fixtures and piping serving the toilet cores of this 9 story building. The existing ductwork was determined to be in good condition and was cleaned and utilized with upgrades to the fans.	<input checked="" type="checkbox"/> Check if project performed with current firm
3.	(1) TITLE AND LOCATION (City and State) 5151 E. BROADWAY UPGRADES Tucson, Arizona	(2) YEAR COMPLETED
		Professional Services 2014 Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Principal Mechanical Engineer - Provided design to replace existing tower air handler and boilers serving 16 story 250,000 sf office building. Design included components that would fit through existing doorways, increase energy efficiency, reduce maintenance, reduce noise, and be constructed over a 3 day weekend.	<input checked="" type="checkbox"/> Check if project performed with current firm
4.	(1) TITLE AND LOCATION (City and State) HENDRICKS ELEMENTARY CHILLER REPLACEMENT Tucson, Arizona	(2) YEAR COMPLETED
		Professional Services 2013 Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Principal Mechanical Engineer - Provided initial consultation to justify replacement of 160 ton chiller for funding from the Arizona School Board. Then included design and construction administration to replace the existing chiller.	<input checked="" type="checkbox"/> Check if project performed with current firm
5.	(1) TITLE AND LOCATION (City and State) PIMA AIR & SPACE MUSEUM EXPANSION Tucson, Arizona	(2) YEAR COMPLETED
		Professional Services 2014 Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Principal Mechanical Engineer - Mechanical and plumbing design for a 27,000 sf airplane museum. The mechanical system had to take into account the airplanes that were on the ground and suspended overhead.	<input checked="" type="checkbox"/> Check if project performed with current firm



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

a. NAME Kenneth G. Weyker	b. ROLE IN THIS CONTRACT Project Manager	c. YEARS EXPERIENCE	
		1. TOTAL 28 years	2. WITH CURRENT FIRM 18 years, since 1996
d. LOCATION (City and State) Tucson, Arizona			
e. EDUCATION (DEGREE AND SPECIALIZATION) University of Arizona, Mechanical Engineering Pima Community College, Mechanical Engineering		f. PROFESSIONAL TRAINING - REGISTRATIONS	
g. OTHER PROFESSIONAL QUALIFICATIONS (Organizations, Awards, etc.) ASHRAE – Associate Member			

H. RELEVANT PROJECTS

1.	(1) TITLE AND LOCATION (City and State) DAVIS MONTHAN AIR FORCE BASE RETRO COMMISSIONING Tucson, Arizona	(2) YEAR COMPLETED	
		Professional Services 2014	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager/Mechanical Engineer - Provided assessments and energy analysis for four buildings on the air force base. Energy analysis were performed to determine the best replacement HVAC system for each building based yearly payback of proposed systems.	<input checked="" type="checkbox"/>	Check if project performed with current firm
2.	(1) TITLE AND LOCATION (City and State) ANDRADA HIGH SCHOOL & PANTANO POLYTECHNIC HIGH SCHOOL Vail, Arizona	(2) YEAR COMPLETED	
		Professional Services 2013	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager/Mechanical Engineer - Provided the mechanical and plumbing design for both schools that are located on one site. The mechanical design included high efficiency packaged units to meet the LEED GOLD certification.	<input checked="" type="checkbox"/>	Check if project performed with current firm
3.	(1) TITLE AND LOCATION (City and State) MARY BELLE MCCORKLE ACADEMY OF EXCELLENCE Tucson, Arizona	(2) YEAR COMPLETED	
		Professional Services 2012	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager/Mechanical Engineer - Provided the mechanical and plumbing design for multiple buildings total over 100,000 square foot on one site. The mechanical design include a high efficiency central plant design with underground chilled and heating water piping distributed to the various buildings on site. This design met the LEED Gold certification.	<input checked="" type="checkbox"/>	Check if project performed with current firm
4.	(1) TITLE AND LOCATION (City and State) SAHUARITA UNIFIED SCHOOL DISTRICT'S MECHANICAL EVALUATION Sahuarita, Arizona	(2) YEAR COMPLETED	
		Professional Services 2012	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager/Mechanical Engineer - Provided assessments and analysis for HVAC replacement at three schools throughout the school district. Project included providing cost estimates and scheduling forecasts.	<input checked="" type="checkbox"/>	Check if project performed with current firm
5.	(1) TITLE AND LOCATION (City and State) PICACHO PEAK VISITOR'S CENTER Picacho, Arizona	(2) YEAR COMPLETED	
		Professional Services 2007	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager/Mechanical Engineer - Provided the mechanical and plumbing design for the new Visitor's Center. The mechanical design included high efficiency, vertical, split system heat pumps to meet the LEED Gold certification	<input checked="" type="checkbox"/>	Check if project performed with current firm



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a. NAME Robert Kunkel	b. ROLE IN THIS CONTRACT Lead Engineer	c. YEARS EXPERIENCE	
		1. TOTAL 9 years	2. WITH CURRENT FIRM 9 years, since 2005
d. LOCATION (City and State) Tucson, Arizona			
e. EDUCATION (DEGREE AND SPECIALIZATION) MS & BS Mechanical Engineering, University of Arizona		f. PROFESSIONAL TRAINING - REGISTRATIONS Healthcare Facility Design Professional US Green Building Council – LEED Green Associate	
g. OTHER PROFESSIONAL QUALIFICATIONS (Organizations, Awards, etc.) ASHRAE (past President Tucson Chapter) currently Region X Treasurer			

H. RELEVANT PROJECTS

1.	(1) TITLE AND LOCATION (City and State) FT. HUACHUCA BLDG 82012 ARMS Ft. Huachuca, Arizona	(2) YEAR COMPLETED
		Professional Services 2014
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Lead Mechanical Engineer for new VRF & Energy Recovery Systems for a 5,000 SF, \$500,000 tenant improvement in the existing evaporative cooled building. Project includes two (2) Equipment Simulation Rooms & one (1) large Conference Room.	<input checked="" type="checkbox"/> Check if project performed with current firm
2.	(1) TITLE AND LOCATION (City and State) FOLEY FEDERAL BUILDING Las Vegas, Nevada	(2) YEAR COMPLETED
		Professional Services Started 2010 – currently on-going
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Lead Mechanical Engineer for on-going various projects within this Federal Building. Completed a \$4 million Energy System Upgrade for the entire 200,000 SF building, including Controls, Variable Primary Pumping, Heat Recovery Chiller, High Efficiency Boilers & Water Heaters. Also providing designs for various tenant improvements ranging in size from 700 SF to 3,000 SF & \$50,000 to \$300,000.	<input checked="" type="checkbox"/> Check if project performed with current firm
3.	(1) TITLE AND LOCATION (City and State) ADOT REST AREA REHABILITATIONS Statewide in Arizona	(2) YEAR COMPLETED
		Professional Services Started 2011 – currently on-going
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project's Lead Mechanical & Plumbing Engineer – Proving the design for new mechanical and plumbing systems for the Restroom Building, as well as miscellaneous plumbing systems at the Care Taker Building at various rest areas throughout Arizona, including Bouse Wash, Burnt Well and Enrenberg Rest Areas.	<input checked="" type="checkbox"/> Check if project performed with current firm
4.	(1) TITLE AND LOCATION (City and State) GREEN VALLEY HOSPITAL Green Valley, Arizona	(2) YEAR COMPLETED
		Professional Services 2015
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project's Lead Mechanical & Plumbing Engineer – Recently completed Construction Documents for a new 150,000 SF hospital which includes 4 OR's, 50 Patient Rooms, ICU, PACU, Laboratory, Imaging, ED Departments & full Kitchen and Laundry Facility. Design included combination chilled/heating water systems with VRF & rooftop DX equipment.	<input checked="" type="checkbox"/> Check if project performed with current firm
5.	(1) TITLE AND LOCATION (City and State) SOUTHERN ARIZONA VETERAN'S ADMINISTRATION HEALTH CARE SERVICES, VA HOSPITAL Tucson, Arizona	(2) YEAR COMPLETED
		Professional Services Started 2010 – currently on-going
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Mechanical Engineer for multiple projects at the Tucson VA Hospital. Recently provided mechanical and plumbing designs for the \$6 mil Upgrades in Building 40 to include new 600 Ton chillers, 24 Calmac tanks for peak load shaving and additional system capacity – central plant serves a majority of the hospital. Currently providing construction documents for Building 90's \$5 mil Mental Health Buildout. A new 15,000 SF expansion includes new 300 Ton chillers/heating water central plant.	<input checked="" type="checkbox"/> Check if project performed with current firm



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

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

a. TITLE AND LOCATION <i>(City and State)</i> PIMA COUNTY OPEN-END CONTRACT TUCSON, ARIZONA	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES ON-GOING	CONSTRUCTION <i>(if applicable)</i>

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER PIMA COUNTY Tom Gordon Tom.gordon@pima.gov 520-724-3374	d. ORIGINAL BUDGET/NTE AMOUNT OF PROJECT VARIES	e. TOTAL COST OF PROJECT
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f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

Open-end contract with over 20 projects that included HVAC system assessment and design. Some of these projects included the following:

Jail Tower AC Assessment

Provided options to change the existing main cooling system serving approximately 100,000 sf jail tower from large built up evap coolers to air conditioning. Options and estimates were provided that included chilled water, direct expansion refrigerant condensers, absorption chiller using existing co-gen system, and fan walls to replace existing vane axial fans.

Adult Detention Center West Unit Mechanical Analysis

Provided initial review of existing evap cooling systems serving this detention center and submitted options for air conditioning. Provided design to replace existing evap cooling systems with similar rooftop packaged units that were placed to avoid any structural or ductwork modifications within the building.

Chiller Replacement at 33 N. Stone

Provided evaluation and design to replace (2) 380 ton chillers and pumps with new equipment to improve energy efficiency and reduce maintenance. The design was provided to allow construction to occur while the building remained fully occupied with no interruption in services.



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

a. TITLE AND LOCATION (City and State) PIMA COMMUNITY COLLEGE OPEN-END CONTRACT TUCSON, ARIZONA	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES ON-GOING	CONSTRUCTION <i>(If applicable)</i>

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER PIMA COMMUNITY COLLEGE Bill Ward wward@pima.edu 520-206-2617	d. ORIGINAL BUDGET/NTE AMOUNT OF PROJECT VARIES	e. TOTAL COST OF PROJECT
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f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

Open-end contract with over 70 projects that included HVAC system assessment and design. Some of these projects included the following:

29th St Coalition Center Central Plant Replacement

Evaluated existing +40 year old system to provide improved comfort and additional capacity. Designed 170 ton water cooled chiller with associated tower, heat exchanger, boiler, and pumps with planned expansion to increase capacity.

West Campus Center for Fine Arts Complex AC Replacement

Provided assessment of existing central plant serving the Fine Arts Complex and its ability to serve additional classrooms, offices, and art rooms that were conditioned using large split system AC units with electric heat. Since the project budget was limited, the existing air handlers were refurbished with new chilled and heating water coils with new piping from the central plant.

Downtown Campus CO Building Warehouse Fan Coils

The existing evap cooled warehouse is located directly across from the central plant. The existing building envelop was upgraded and chilled and heating water piping was extended to this building to serve new fan coils to adequately cool and heat this building.

Northwest Campus Central Plant Expansion

The existing central plant was enlarged with an additional 250 ton chiller, cooling tower, expanded heat exchanger, 3.2MMBH boiler, and associated pumps and controls. This expansion was provided to support a new science building on campus.



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

<p>a. TITLE AND LOCATION <i>(City and State)</i> UNIVERSITY OF ARIZONA MEDICAL CENTER OPEN-END CONTRACT TUCSON, ARIZONA</p>	<p>b. YEAR COMPLETED</p> <table border="1"> <tr> <td data-bbox="1004 443 1276 522">PROFESSIONAL SERVICES ON-GOING</td> <td data-bbox="1276 443 1584 522">CONSTRUCTION <i>(If applicable)</i></td> </tr> </table>		PROFESSIONAL SERVICES ON-GOING	CONSTRUCTION <i>(If applicable)</i>
PROFESSIONAL SERVICES ON-GOING	CONSTRUCTION <i>(If applicable)</i>			

23. PROJECT OWNER'S INFORMATION

<p>c. PROJECT OWNER UNIVERSITY OF ARIZONA David Koepf David.koepf@uahealth.com 520-874-2897</p>	<p>d. ORIGINAL BUDGET/NTE AMOUNT OF PROJECT VARIES</p>	<p>e. TOTAL COST OF PROJECT</p>
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f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

Open-end contract with over 100 projects that included HVAC system assessment and design. Some of these projects included the following:

UAMC Decontamination and Sterile Processing Pressurization

After an inspection by the Joint Commissioning, the hospital was found to be in non-compliance with the room pressurization for the Central Sterilization area. The existing systems were evaluated and a design was completed along with the construction and re-certification in an expedited schedule to meet the 45 day compliance requirement.

UAMC Operating Room Dehumidification

The hospital wanted to provide room conditions for specific procedures that required extremely dry air during our monsoon season. A 21,000 cfm dehumidification unit was designed to reduce the outside entering air vapor content to less than 5 grains of moisture to meet the room conditions and ventilation requirements for the 15 operating rooms, recovery area, and future hybrid operating rooms. This dehumidification unit used chilled water and high pressure steam from the main systems and supplied the ventilation air to the existing air handlers during the wet seasons.

UAMC South Campus Convert Endoscopy to Bronchoscopy

The existing endoscopy suite needed to be converted to a bronchoscopy room that require a large negative pressure with the air exhausted directly to the exterior to a safe area to avoid contact. Unfortunately, the room was located on the ground floor of a 4 story building and there were no clear paths to the exterior. After extensive field verification, a path was found to a lower roof and HEPA filters were used to capture any infectious contaminants.



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a. TITLE AND LOCATION (City and State) CITY OF TUCSON OPEN-END CONTRACT TUCSON, ARIZONA	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES ON-GOING	CONSTRUCTION (If applicable)

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER CITY OF TUCSON Brian Conte Brian.conte@tucsonaz.gov 520-837-6319	d. ORIGINAL BUDGET/NTE AMOUNT OF PROJECT VARIES	e. TOTAL COST OF PROJECT
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f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

Open-end contract with over 70 projects that included HVAC system assessment and design. Some of these projects included the following:

Tucson Community Center District Underground Hydronic Piping Replacement and Expansion
Provided initial assessment and estimates for replacement and expansion of the existing underground chilled and heating water distribution to the City downtown facilities. Provided construction documents and construction administration for new direct buried piping through the downtown area to over 6 facilities that included the police headquarters, central fire station, downtown arena, music hall, performance hall, and others.

Thomas O. Price Service Center HVAC Upgrades
Provide initial assessment and estimates to replace the existing HVAC systems in four buildings throughout the Service Center. Provided construction documents and construction administration for the 80,000 square foot project.

Intermodal Depot Energy Efficiency Improvements
An evaluation was provided of the existing evap condenser system and numerous options were reviewed with the City facilities department. To significantly reduce maintenance cost, the chiller was replaced with a 150 ton air cooled chiller with upgraded building controls.



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

a. TITLE AND LOCATION <i>(City and State)</i> UNISOURCE TOWER TUCSON, ARIZONA	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES 2011	CONSTRUCTION <i>(If applicable)</i>

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER UNISOURCE ENERGY CORPORATION Scott Rathbun Srathbun@tep.com 520-917-8499	d. ORIGINAL BUDGET/NTE AMOUNT OF PROJECT KC Original Fee: \$270,625 Additional Services: \$167,415 Total Fee: \$438,040	e. TOTAL COST OF PROJECT \$65,000,000
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f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

Physical Description

- 9-story high rise building in downtown Tucson
- 270,000 sf office building
- 245,200 sf underground parking structure.

Challenges

- Accelerated design and construction schedule that was limited to less than 18 months.
 - Completed shell building plans with all mechanical equipment in 6 months.
- Sealing under floor system.
 - Continuous inspections and meetings with contractors to emphasis importance of sealing under floor.

HVAC Systems

- (3) 350 ton water cooled chillers (full redundancy)
- Oversized hydronic economizer
- Primary variable flow pumping arrangement
- 175 ton back-up air cooled chiller for IT computer center
- Under Floor Air Distribution (UFAD)
- Dedicated outside air systems to pre-treat and dehumidify ventilation air
- Cooling tower blowdown and rain water routed to 150,000 gallon underground cistern and filter treatment system for landscape irrigation
- LEED Gold Certification

Owner's Objectives

- Simplified operation and maintenance
- Extremely high energy efficiency
- Exceptional indoor air quality
- Low sound levels from mechanical systems
- Flexible for office reconfigurations
- Low construction costs

With the mechanical system installed, all these objectives were achieved.



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6. ADDITIONAL INFORMATION

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

KC Mechanical Engineering has one of the largest mechanical engineering staffs serving the architectural community of Southern Arizona. With a staff of twelve, consisting of two Professional Engineers, one Engineer-In-Training, one Design Engineer, seven Mechanical/Plumbing Designers and one Office staff, KC is confident that any schedule, no matter how demanding, can be met without compromising quality.

At KC Mechanical Engineering, we pride ourselves on our ability to perform our services promptly and efficiently. We understand the importance of deadlines and the value of time, and are proficient in creating a schedule which is thorough and realistic, yet satisfies the client's requirements. Communication between the client and the design team is critical maintaining the schedule. Ken Weyker, as Project Manager, will be in charge of project scheduling on ADOA projects.

Preparation:

- KC Mechanical Engineering is realistic, both with ourselves and the client, about how much time a project will take. We are efficient, but insist on providing the client with the highest quality of workmanship.
- We identify specific client scheduling issues. Schedules must respond to client needs.
- We prepare a task oriented schedule with an understanding of the critical path.
- KC does not underestimate time for existing analysis and quality control.

Maintenance:

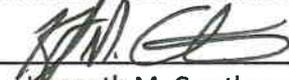
- The schedule is reviewed and committed to by the team.
- Progress is monitored and controlled by the Project Manager.
- KC is committed and takes pride in meeting schedules. We put in the time necessary to meet deadlines.
- With a technical staff of eleven, KC has the flexibility to adjust staffing as required.
- Communication between KC and ADOA is critical in maintaining the schedule.
- KC responds quickly and efficiently to client questions.

With a technical staff of eleven, KC is one of the largest mechanical engineering firms in Southern Arizona, and can easily accept any project the client presents and create a schedule which is thorough and realistic, while satisfying the client's requirements.

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:	15
b. Percentage of Total Work Attributable to Non-Government Work:	85

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

Signature: 
Name: Kenneth M. Cawthorne

Date: December 18, 2014
Title: Principal