



Offer and Acceptance

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

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

PAGE
1

Offeror: Palmer Engineers, 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.

Palmer Engineers, Inc.

Company Name

2975 North Country Club Road

Address

Tucson, Arizona 85716-1911

City

State

Zip

jamespalmer@palmerengr.com

Contact Email Address

Signature of Person Authorized to Sign Offer

James S. Palmer

Printed Name

President

Title

Phone: (520) 326-4331

Fax: (520) 326-8121

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 XX 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 26th day of February 20 16

Procurement Officer



ATTACHMENT I – General Qualifications

ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:
ADSP016-00005912

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(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:	Palmer Engineers, Inc.
b. FIRM (OR BRANCH OFFICE) STREET:	2975 North Country Club Road
c. FIRM (OR BRANCH OFFICE) CITY:	Tucson
d. FIRM (OR BRANCH OFFICE) STATE:	Arizona
e. FIRM (OR BRANCH OFFICE) ZIP CODE:	85716-1911

f. YEAR ESTABLISHED:	1995
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(g1). OWNERSHIP - TYPE:	Corporation
(g2) OWNERSHIP - SMALL BUSINESS STATUS:	Yes

h. POINT OF CONTACT NAME AND TITLE:	James S. Palmer, President
i. POINT OF CONTACT TELEPHONE NUMBER:	(520) 326-4331
j. POINT OF CONTACT E-MAIL ADDRESS:	jamespalmer@palmerengr.com

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	1	
CADD Technician	S	1	
Other	P	1	
Total		3	



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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 <i>(see below)</i>
1	Auditoriums and Theaters	1
4	Community Facilities	1
2	Dining Halls; Clubs; Restaurants	1
3	Educational Facilities; Classrooms	1
1	Elevators; Escalators; People-Movers	1
1	Energy Conservation; New Energy Sources	1
3	Hospital and Medical Facilities	1
1	Libraries; Museums; Galleries	1
1	Museums	1
2	Prisons and Correctional Facilities	1
1	Warehouse and Depots	1
1	Solar Energy Utilization	1

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

- | | |
|--|--|
| <ul style="list-style-type: none"> 1. Less than \$100,000 2. \$100,000 to less than \$250,000 3. \$250,000 to less than \$500,000 4. \$500,000 to less than \$1 million 5. \$1 million to less than \$2 million | <ul style="list-style-type: none"> 6. \$2 million to less than \$5 million 7. \$5 million to less than \$10 million 8. \$10 million to less than \$25 million 9. \$25 million to less than \$50 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 James S. Palmer	b. ROLE IN THIS CONTRACT Project Manager & Mechanical Engineer	c. YEARS EXPERIENCE	
		1. TOTAL 35	2. WITH CURRENT FIRM 20
d. LOCATION <i>(City and State)</i> Palmer Engineers, Inc., Tucson, Arizona			
e. EDUCATION <i>(DEGREE AND SPECIALIZATION)</i> The University of Arizona Bachelor of Science in Mechanical Engineering		f. PROFESSIONAL TRAINING - REGISTRATIONS Arizona Registrant #17045 - Professional Engineer with proficiency in Mechanical Engineering	
g. OTHER PROFESSIONAL QUALIFICATIONS <i>(Organizations, Awards, etc.)</i> ASHRAE - Associate Member NFPA - Member COT Fire Code Review Committee - Member			

H. RELEVANT PROJECTS

1.	(1) TITLE AND LOCATION <i>(City and State)</i> St. Philip's In The Hills Episcopal Church Nave HVAC Improvements Tucson AZ	(2) YEAR COMPLETED
		Professional Services 2015
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Project Manager. Renovate HVAC system serving the Nave. Developed a new control system to enable operation of the heating system for the early services and the cooling for the later services of the same day. The control system includes demand control ventilation to adjust the outside airflow into the Nave based upon the carbon dioxide level in the building. Boiler Room renovation replaced existing boiler with two new high efficiency boilers, new expansion tanks and chilled and heating water pumps. Construction is scheduled to complete in early 2016. Sub-consultant: Monrad Engineering, Inc. (Electrical).	<input checked="" type="checkbox"/> Check if project performed with current firm
2.	(1) TITLE AND LOCATION <i>(City and State)</i> JW Marriott Tucson Starr Pass Resort & Spa Clubhouse Cooking Hood Makeup Air Assessment Tucson AZ	(2) YEAR COMPLETED
		Professional Services 2015
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Project Manager. Assessment of the existing cooking hood for the purpose of replacing the equipment. On-site space and equipment verification, calculations, and assessment report.	<input checked="" type="checkbox"/> Check if project performed with current firm
3.	(1) TITLE AND LOCATION <i>(City and State)</i> Arizona Aerospace Foundation Titan Missile Museum Cooling Improvements Green Valley AZ	(2) YEAR COMPLETED
		Professional Services 2014
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Project Manager. Improvements to the cooling system for the underground Control Center. The CC-1 compressor/condenser unit is a 5-Ton unit that is located outdoors and connected down through the 6-story silo to the AH-1, a fan coil blower unit, located in the level-1 mechanical room. AH-1 duct runs up through level-2 and level-3 to serve those areas. The 12-inch outside air intake duct is also located outdoors and connects down through the silo. Sub-consultant: Engineered Design Group Inc (Electrical).	<input checked="" type="checkbox"/> Check if project performed with current firm
4.	(1) TITLE AND LOCATION <i>(City and State)</i> US C&BP Border Patrol Station Infrastructure Improvement - Roof Retrofit Nogales AZ	(2) YEAR COMPLETED
		Professional Services 95%
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Design Team Project Manager. Design/Build project for roof replacement and heating/cooling system modifications to existing metal building. Design documents are complete and in final review. Construction is scheduled to complete in 2016. Sub-consultants: Herzog Associates PLLC (Architect); Monrad Engineering, Inc. (Electrical); TLCP Structural, Inc. (Structural).	<input checked="" type="checkbox"/> Check if project performed with current firm
5.	(1) TITLE AND LOCATION <i>(City and State)</i> SAVAHCS Tucson Expand Steam to Hydronic System Tucson AZ	(2) YEAR COMPLETED
		Professional Services 2014
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Design Team Project Manager. 1.39M design/build project to expand the complex' steam to hydronic system to 4 buildings, to install a solar hot water heating system in Building 50, and to replace the domestic hot water heating equipment in Building 50. Sub-consultants: Herzog Associates PLLC (Architect); Monrad Engineering, Inc. (Electrical); TLCP Structural, Inc. (Structural).	<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 (City and State) Pueblo High Magnet School Campus Buildings Analysis Tucson, Arizona	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES 2009	CONSTRUCTION (If applicable)

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER Tucson Unified School District No. 01	d. ORIGINAL BUDGET/NTE AMOUNT OF PROJECT	e. TOTAL COST OF PROJECT \$ 25,758
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f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

Palmer Engineers, Inc. was prime engineer on this project, performed under our open-end contract with Tucson Unified School District No. 01. Our sub-consultants were registered structural, electrical and architectural professionals.

The Lever Gymnasium had been experiencing problems with the existing cooling equipment. The scope of this project began as an analysis for the renovation of the cooling system at the Gymnasium building, and for a system upgrade from evaporative cooling to air conditioning.

The scope of work changed considerably after the initial assessment report was submitted. Rather than go forward with the design and construction phases for the Gymnasium building, the school district determined it was necessary to continue with assessments of the entire complex in the interest of consolidating similar construction work in multiple buildings. Our project was then expanded to include the analysis of the existing heating and cooling systems for the entire school campus and to report on the conditions observed. Our evaluation reports included an overview of the exiting installations at each of the buildings, with details of several options for system improvement, correction or replacement, and cost implications to achieve the owner's objective.

Our ability to schedule our workload to adapt to the additional scope, and to re-negotiate with our client and sub-consultants, demonstrates Palmer Engineers' adaptability to changing scopes, schedules and other objectives.

As a result of this project's assessments, our design team was successful in the design and construction phases (administered under a different contract), utilizing pre-purchased equipment and phased construction.

This project is of similar scope and size that we would expect from a contract resulting from the State of Arizona or a State Cooperative Member. The successful completion of this project demonstrates our ability to identify the scope of work, schedule resources, and contact with other design professional to deliver a detailed, correct and complete submittal to our client.



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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> 9 High Schools Kitchen Hood Renovations Tucson, Arizona	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES 2009	CONSTRUCTION <i>(If applicable)</i> 2011

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER Tucson Unified School District No. 01	d. ORIGINAL BUDGET/NTE AMOUNT OF PROJECT \$1,013,475 (owner's budget)	e. TOTAL COST OF PROJECT \$826,193 (design & construction)
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f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

Palmer Engineers was prime engineer on this project, performed under our open-end contract with Tucson Unified School District 01. Our sub-consultants were registered architectural, structural and electrical professionals.

This project began as an assessment to provide the scope and cost estimates to replace the existing Kitchen cooking hoods at nine High Schools around Tucson. After the School District's review of the assessment submittal, our firm was contracted for the design and construction phases.

Phase 1 construction began in June 2010 and replaced the existing Kitchen cooking hoods at Cholla, Rincon, Sabino, Sahuaro and Santa Rita High Schools. The Phase 2 construction began in May 2011 and replaced the existing Kitchen cooking hoods at Pueblo, Palo Verde, Tucson and Catalina High Schools.

The construction package was bid in two separate contracts to allow smaller contractors to bid the project and to allow TUSD's Food Services to manage the construction in fewer Kitchens at the same time. The drawings were prepared to allow each of the 9 school sites to be separated from the other sites. Both projects used pre-purchasing of equipment to reduce mark-up costs on major equipment purchases.

As prime engineer, we provided the necessary design and construction coordination between the client, sub-consultants, general contractors and users. Those relationships are consistent with those that we would expect while working under contract with the State of Arizona or a State Cooperative Member.



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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) SAVAHCS Tucson Energy Project 2011 Tucson, Arizona	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES 2012	CONSTRUCTION (If applicable) 2013

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER US Dept of Veterans Affairs	d. ORIGINAL BUDGET/NTE AMOUNT OF PROJECT \$2,483,000	e. TOTAL COST OF PROJECT \$2,483,000
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f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

Palmer Engineers was prime engineer on this project and our sub-consultants were registered architectural, electrical and structural professionals. The general contractor contracted with our firm to manage the design side of this project.

This project was bid with base items and additional option items that were determined by the US Army Corps of Engineers. The selected items of work were:

- Replace the steam system with hot water system in Buildings 2, 3, 4, 38, 50 and 57
- Install a solar hot water heating system in Building 80
- Remove/Replace the domestic hot water heating equipment in Building 30

Up to the point of the contractor selection, Palmer Engineers performed an assessment of the tasks ordered and designed the project through the schematic design phase documents. Visits to the site to verify existing conditions, conferences with the client and soliciting sub-consultants for their fees, discipline designs and cost estimates was all part of the pre-project work.

After construction was awarded to our contractor, our firm attended weekly construction meetings and site observations to ensure the quality of design was met. As was appropriate, we brought our sub-consultants on site to observe the installation relative to their professional discipline. The contractor equipment and product submittals were reviewed by the appropriate professional on the design team and then returned to the contractor with an appropriate reply. Construction issues were coordinated with the contractor.

This project is an example of Palmer Engineers' ability to manage the design side of a project, from the scope determination phase all the way through to construction closeout.



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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> SAVAHCS Tucson Expand Steam to Hydronic System Tucson, Arizona	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES 2014	CONSTRUCTION <i>(If applicable)</i> 2015

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER US Dept of Veterans Affairs	d. ORIGINAL BUDGET/NTE AMOUNT OF PROJECT \$1,390,000	e. TOTAL COST OF PROJECT \$1,390,000
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f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

Palmer Engineers was prime engineer on this project and our sub-consultants were registered architectural, electrical and structural professionals. The general contractor contracted with our firm to manage the design side of this project.

The project was bid with base items and additional option items that were determined by the US Army Corps of Engineers. The five different tasks selected, that expanded the VA complex' steam to hydronic system, were:

- Extend the hydronic system from Building 38 rooftop to the equipment room of Building 50. Tie in the lines to Building 50 process and domestic hot water system and provide HX equipment as necessary.
- At Building 50, include provision for later expansion of the hydronic loop to Building 80.
- Install a high temperature solar hot water heating system on the roof of Building 50 and tie into the hydronic loop. The new system occupies 3,000 SF of roof area and has a peak capacity of approximately 150,000 BTU/HR.
- Extend Hydronic Loop lines in Building 57 mechanical room B190 to AHU-12 heating skid.
- Extend the hydronic loop to Building 1 and Building 1A and integrate the hydronic loop into the process hot water heating for the Building 1 AHU and Building 1A AHU with expansion to Building 30.

Up to the point of the contractor selection, Palmer Engineers performed an assessment of the tasks ordered and designed the project through the schematic design phase documents. Visits to the site to verify existing conditions, conferences with the client and soliciting sub-consultants for their fees, discipline designs and cost estimates was all part of the pre-project work.

After construction was awarded to our contractor, our firm attended weekly construction meetings and site observations to ensure the quality of design was met. As was appropriate, we brought our sub-consultants on site to observe the installation relative to their professional discipline. The contractor equipment and product submittals were reviewed by the appropriate professional on the design team and then returned to the contractor with an appropriate reply. Construction issues were coordinated with the contractor.

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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> St Philip's In The Hills Episcopal Church Nave HVAC Improvements Tucson, Arizona	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES 2015	CONSTRUCTION <i>(If applicable)</i>

23. PROJECT OWNER'S INFORMATION

c .PROJECT OWNER St Philip's In The Hills Episcopal Church	d .ORIGINAL BUDGET/NTE AMOUNT OF PROJECT \$134,355	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)

This project began as an investigation into improvements to the existing HVAC system serving the Nave at the historic Saint Phillip's In The Hills Episcopal Church, located at 4440 North Campbell Avenue in Tucson, Arizona.

The developed scope of work dictated the development of control drawings for a new control system to enable operation of the heating system for the early services and the cooling for the later services of the same day. The control system incorporates demand control ventilation to adjust the outside airflow into the Nave based upon the carbon dioxide level in the building. In addition, the control system includes a variable frequency drive (VFD) for the main air handler to reduce the airflow and fan energy use when the loads are low.

The Boiler Room renovations included replacement of the existing boiler with two new high efficiency boilers. The removal of the existing boiler and previously abandoned chiller was required to enable installation of two new boilers.

The developed plan drawings indicated the work for the two air handlers, size of new expansion tanks for the heating water system and the chilled water system, replacement of one chilled water pump, and the heating water pump

Construction for the Nave is 85% complete.

As additional scope during the construction phase, the church requested a new split system heat pump system be designed to heat and cool the West Chapel. The Heat pump and air handler will be located in a new, small, equipment room. Ductwork and outlets have to be concealed in the Chapel area so as not to create blight or divert attention from the services.

West Chapel construction documents are 95% complete.



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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.)

History

Mr. John Paul Jones established our firm in November 1953 as John Paul Jones Consulting Engineer. On October 31, 1954, Stewart R. "Dick" Palmer (John Paul's son-in-law) joined the firm as partner. Upon Mr. Jones' death in 1970, our firm name changed to Stewart R. Palmer Consulting Engineers, Inc. In May 1980, James S. Palmer (Dick Palmer's son & John Paul Jones's grandson) began full time engineering with the firm. In 1996 the firm name was shortened to its current name, Palmer Engineers, Inc. James Palmer is Principal.

Energy

We have been performing energy analysis computer simulations of HVAC systems since 1978. We have performed energy analysis using software from Trane, Carrier and the U.S. Department of Energy (DOE). In 1985 we worked with Energy Simulation Specialists to simulate the chiller plant loads for Tucson Medical Center. The project analyzed the existing loads, built a computer model of the loads and predicted how changes to the system would affect the energy costs.

Estimate

Estimates are prepared in our office using prices established from experience, asking suppliers for prices, and verifying current trends in pricing with contractors. Cost opinions are normally prepared after the scope of work is established and are updated at each phase of design. The scope of work will be closely followed; any changes that will affect cost are brought to the client's attention.

Design Approach

Our firm's primary concern is with designing quality systems for our clients. We believe this provides our clients with the best service. Our preferred design approach is as follows:

1. Spend the time necessary to investigate existing systems.
2. Review energy bills.
3. Interview staff to determine how the existing systems are currently operated.
4. Analyze the impact of anticipated growth of the client's facility.
5. Obtain as-built drawings of the facility, if available.
6. Review options for new systems and for possible relocation of existing equipment.
7. Review phasing strategies to insure the facility is kept operational.
8. After the on-site review, a schematic design will be developed and submitted for review and approval.
9. An energy analysis may be included.
10. With the approval of the schematic design, construction documents will be prepared.

Communication

This is a cooperative effort where we are working together to provide our client with an efficient and operational system. We will be in close communication with our client during the pre-design phase and until a final scope of work has been established. During the detailing design, we will continue to communicate; when necessary, written reports will be submitted.

Quality Control

Our firm uses a checklist method for quality control. We have standard checklists we use for double-checking, construction documents, construction observations and final punch-lists. The quality and seamless integration of each discipline's design is achieved by constant communication and coordination between all of the team firms.

Note: Some Tables in this document have formatting adjustments to fit within the page margins.

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:	87
b.	Percentage of Total Work Attributable to Non-Government Work:	13

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

Signature:  Date: DEC 21, 2015

Name: James S. Palmer Title: President