JOHNSTON ENGINEERING COMPANY
HEATING, VENTILATION, AIR CONDITIONING, PLUMBING

9777 N. 91st Street, Suite 100
Scottsdale, AZ 85258
Phone (480) 443-8773
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E-mail: tomj@jechvac.com

December 2, 2013

Melissa Bauer
Senior Procurement Specialist
Arizona State Procurement Office
100 N. 15th Ave., Suite 201
Phoenix, Arizona 85007

Subject: Engineering Services for
Annual Professional Services Contract
Bid Solicitation No.: ADSPO14-00003465

Dear Ms. Bauer:

Johnston Engineering Company is pleased to submit our qualifications for Engineering Services to the State of Arizona for the Annual Professional Services Contract Bid Solicitation No. ADSPO14-00003465.

Johnston Engineering Company has special expertise in mechanical engineering related to design and construction administration for renovation, replacement, or new construction of air handlers, ductwork, chiller systems, cooling tower media, cooling towers, energy management systems, energy green building design, emergency generators, and boilers. Examples of this expertise include: (1) KPNX television relocation. This project involved relocation of a TV station from its present location to the first floor of the Arizona Republic newspaper building. Special mechanical features were new ultra low sound air handling system, new high efficiency chillers on the 10th floor roof plus new mechanical equipment interface with existing EMS; (2) Paradise Valley School District Wide Energy Upgrades. This project involved District Wide energy analysis on 55 buildings and EMS/BAS system upgrades plus lighting and mechanical upgrades; and (3) Regency House Condominium Mechanical / HVAC Upgrades. This project involved the renovation of the outside make up air handler, the replacement of the existing chiller with a high efficiency chiller, and the addition of an energy management system for the central chiller plant

We do HVAC, mechanical design, and plumbing design. It is our intent to continue to bring our cost-effective and energy efficient design experience to the State of Arizona buildings.

Thank you for the opportunity to propose our qualifications. We have had successful State of Arizona projects in the past and I would sincerely like to be a part of improving the State of Arizona building properties mechanical and plumbing systems in the future. Should you have any questions or comments, please feel free to contact our office.

Best regards,

JOHNSTON ENGINEERING COMPANY

Thomas W. Johnston, P.E.
President

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

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

a.	FIRM (OR BRANCH OFFICE) NAME:	Johnston Engineering Company
b.	FIRM (OR BRANCH OFFICE) STREET:	9777 N. 91ST Street, Suite 100
c.	FIRM (OR BRANCH OFFICE) CITY:	Scottsdale
d.	FIRM (OR BRANCH OFFICE) STATE:	Arizona
e.	FIRM (OR BRANCH OFFICE) ZIP CODE:	85258
f.	YEAR ESTABLISHED:	1992
(g1).	OWNERSHIP - TYPE:	Corporation
(g2)	OWNERSHIP - SMALL BUSINESS STATUS:	Small Business
h.	POINT OF CONTACT NAME AND TITLE:	Tom Johnston, President
i.	POINT OF CONTACT TELEPHONE NUMBER:	(480) 443-8773
j.	POINT OF CONTACT E-MAIL ADDRESS:	tomj@jechvac.com
k.	NAME OF FIRM *(If block 1a is a branch office)*:	Same as 1a

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	2	N/A
Project Manager	P	2	N/A
CADD Technician	S	2	N/A
Other (Administrator)	P	1	N/A
Total		7	

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	Auditoriums and Theaters	1
7	Automation; Controls; Instrumentation	2
1	Computer Facilities	1
1	Construction Management	1
22	Educational Facilities; Classrooms	2
3	Energy Conservation; New Energy Sources	1
13	Fire Protection	1
22	Heating; Ventilating; Air Conditioning	2
2	Historical Preservation	1
7	Industrial Buildings; Manufacturing Plants	1
4	Labs – Research – Wet	1
1	Measurement / Verification / Conservation Water Consumption	1
5	Office Buildings; Industrial Parks	1
4	Plumbing and Piping Design	1
2	Solar Energy Utilization	1
1	Warehouse and Depots	1

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

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
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

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

a. NAME	b. ROLE IN THIS CONTRACT	c. YEARS EXPERIENCE	
		1. TOTAL	2. WITH CURRENT FIRM
THOMAS W. JOHNSTON	MECHANICAL ENGINEER	40 Years	21 Years

d. FIRM NAME AND LOCATION *(City and State)*

JOHNSTON ENGINEERING COMPANY, Scottsdale, Arizona

e. EDUCATION *(DEGREE AND SPECIALIZATION)*

B.S. Mechanical Engineering Technology,
Oregon State University

f. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*

Mechanical Engineer, 22374, Arizona
Mechanical Engineer, 18114, California
Mechanical Engineer, 9576, Oregon

g. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Additional Education and Technical Course Work: Certified Energy Management (in process). Tom is a LEED Accredited Professional, 2009. He received first place – Category I Region XI ASHRAE Energy Efficient Buildings for Oregon State University Crop Science Research Facility. He was a seminar speaker at ASHRAE International Conference, a speaker at Arizona Public Service seminar on Controlling Electric Costs in Mining Supply Industry, and for Arizona Public Service seminar on Absorption vs. Electrical Chiller First Costs. Tom was a panel expert for Indoor Air Quality conference. He was awarded Energy Engineer of the Year, 1994 Arizona Chapter. Applying for Certified Energy Management (in process)

H. RELEVANT PROJECTS

1)

(1) TITLE AND LOCATION *(City and State)*
Yavapai Elementary School
Scottsdale, AZ

(2) Year Completed
Professional Services: 2012
Construction *(if applicable):* 2013

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE: [X] Check if project performed with current firm

The scope included a mechanical design to implement a new mechanical chiller system replacement. The scope also included a mechanical design to replace the air distribution for the school including fan coil units and air handling units. Specific Role included mechanical engineering and construction administration. Approximate SF = 77,427. Estimated Cost of Construction: 1 million.

2)

(1) TITLE AND LOCATION *(City and State)*
Bostrom High School Chiller Replacement
Phoenix, AZ

(2) Year Completed
Professional Services: 2013
Construction (*if applicable):*

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE: [X] Check if project performed with current firm

The scope includes a mechanical/electrical design to implement a new mechanical chiller system replacement. It includes upgrades to the existing mechanical systems including central plant replacement and limited construction administration. Specific Role included mechanical engineering and construction administration. Currently under construction. Approx. 41,047 SF, Estimated Cost of Construction = $150,000.

3)

(1) TITLE AND LOCATION *(City and State)*
Honeywell International Cooling Tower Assessment
Tempe, AZ

(2) Year Completed
Professional Services: 2013
Construction *(if applicable):*

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE : [X] Check if project performed with current firm

The scope included a cooling tower assessment to determine best approach for accommodating/replacing two existing cooling towers serving a 1200 ton chiller with two new cooling towers. Evaluating the feasibility of replacing or relocating the existing ground mounted cooling towers to the roof of the central plant. Specific Role included mechanical engineering and construction administration. Approx. 925,000 SF, Estimated Cost of Construction: $260,000.

4)

(1) TITLE AND LOCATION *(City and State)*
PVUSD Horizon High School (Phase 1)
Phoenix, AZ

(2) Year Completed
Professional Services: 2013
Construction *(if applicable):* 2013

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE: [X] Check if project performed with current firm

The scope included upgrades to the existing mechanical systems, EMS upgrades including building automation system renovations/upgrades, FCU replacement, limited construction administration: Specific Role included mechanical engineering and construction administration. Approx. 278,194 SF, Estimated Cost of Construction: $300,000.

5)

(1) TITLE AND LOCATION *(City and State)*
PVUSD Shadow Mountain High School Water Source Heat Pump Replacement,
Phoenix, AZ

(2) Year Completed
Professional Services: 2013
Construction *(if applicable):* 2013

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE: [X] Check if project performed with current firm

The scope included design development, water source heat pump replacements, limited construction administration. Specific Role included mechanical engineering and construction administration. Approx. 324,927 SF, Estimated Cost of Construction: $250,000.

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

a. NAME	b. ROLE IN THIS CONTRACT	c. YEARS EXPERIENCE	
EMILIO GONZALEZ	MECHANICAL ENGINEER	1. TOTAL 3 Years	2. WITH CURRENT FIRM 2 Years

d. FIRM NAME AND LOCATION *(City and State)*

JOHNSTON ENGINEERING COMPANY, Scottsdale, Arizona

e. EDUCATION *(DEGREE AND SPECIALIZATION)*

B.S. Mechanical Engineering,
University of Arizona

f. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*

Engineer in Training, Arizona

g. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Additional Education and Technical Coursework includes: (1) Carrier Technical Development Program – 2013. (2) HVAC Design. (3) Technical Sales and Marketing. (4) Fuel Cell Design. (5) Renewable Energy Systems and Design. (6) Theory of Photovoltaic Cells. Memberships include: (1) American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) Member #8224280. (2) Society of Hispanic Professional Engineers.

H. RELEVANT PROJECTS

1)
(1) TITLE AND LOCATION *(City and State)*
City of Mesa
District Cooling Energy Management and Energy Conservation Master Plan (15 Sites)
Mesa, AZ

(2) Year Completed
Professional Services: 2013
Construction *(if applicable):* N/A

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

[X] Check if project performed with current firm

The scope was for a District Cooling Energy Management and Energy Conservation Master Specification. Some of the tasks included were: (1)Review of Data for each of the 15 buildings this included identifying model and condition of the energy management system by building, identify interface of each building system to District cooling system, identifying building components. (2) Prepare sequences of operation for building mechanical system associated with District cooling, this included air systems, air handlers, fan coil units, exhaust fans, supply fans, chiller plant at each building, interface, IT DX equipment, lighting control, District cooling system. Specific Role included mechanical engineering analysis. Approx.800,000 SF.

2)
(1) TITLE AND LOCATION *(City and State)*
Paradise Valley High School
Modular Central Plant and Cafeteria/Gym Upgrades
Phoenix, AZ

(2) Year Completed
Professional Services: 2013
Construction (*if applicable):* 2013

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

[X] Check if project performed with current firm

The scope was for a mechanical design, it included field verification, pre purchase of long lead time equipment (modular central plant), upgrades to the existing mechanical system including new modular central plant plus piping insulation and one rooftop DX unit replacement. Also included was the interface of an existing building automation system to the new modular central plant, associated interface with existing controls and construction administration. Specific Role included mechanical engineering and construction administration. Approx. 40,000 SF, Estimated Cost of Construction: $1.4 million.

3)
(1) TITLE AND LOCATION *(City and State)*
Snowflake Unified School District
Snowflake, AZ

(2) Year Completed
Professional Services: 2013
Construction *(if applicable):* 2013

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

[X] Check if project performed with current firm

The scope was for a heating system evaluation to determine the condition of the existing equipment and make recommendations, construction documents, and construction administration. Specific Role included mechanical engineering and construction administration. Approx. 6,000 SF, Estimated Cost of Construction: $40,000.

4)
(1) TITLE AND LOCATION *(City and State)*
St. Michael the Archangel
Florence, AZ

(2) Year Completed
Professional Services: 2013
Construction *(if applicable):* 2013

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

[X] Check if project performed with current firm

The scope included a schematic design, design development, construction documents, bidding, and construction administration for St. Michael the Archangel. Specific Role included mechanical engineering and construction administration. Approx. 9,500 SF, Estimated Cost of Construction: $1 million.

5)
(1) TITLE AND LOCATION *(City and State)*
Flinn Foundation - Mechanical System Upgrade Design, Phoenix, AZ

(2) Year Completed
Professional Services: 2013
Construction *(if applicable):* 2013

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

[X] Check if project performed with current firm

The scope included a mechanical and electrical design to implement a new mechanical chiller system replacement. Field verification, upgrades to the existing mechanical systems including central plant replacement and construction administration were done. Specific Role included mechanical engineering and construction administration. Approx. 30,000 SF, Estimated Cost of Construction: $420,000.

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

a. NAME	b. ROLE IN THIS CONTRACT	c. YEARS EXPERIENCE	
ROD COLLERA	PROJECT MANAGER	1. TOTAL 6 Years	2. WITH CURRENT FIRM 6 Years

d. FIRM NAME AND LOCATION *(City and State)*

JOHNSTON ENGINEERING COMPANY, Scottsdale, Arizona

e. EDUCATION *(DEGREE AND SPECIALIZATION)*

Associate of Applied Science in Design and AutoCAD

f. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*

N/A

g. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*

Additional Education and Technical Coursework includes: (1) Certified Energy Management (in process). (2) Revit I, Scottsdale Community College – 2013. (3) Carrier Technical Development Program – 2013. Memberships include: (1) American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) Member #8146552. (2) U.S. Green Building Council.

H. RELEVANT PROJECTS

1)

(1) TITLE AND LOCATION *(City and State)*
Arizona Ballet
Phoenix, AZ

(2) Year Completed
Professional Services: 2013
Construction *(if applicable):* 2013

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

[X] Check if project performed with current firm

The scope included a mechanical and plumbing design for 40,000 SF second generation tenant improvement. The scope included schematic design, design development, construction documents, and construction administration. Specific Role included design and construction administration. Approx. 50,000 SF, Estimated Cost of Construction: $7 million.

2)

(1) TITLE AND LOCATION *(City and State)*
Arizona Opera
Phoenix, AZ

(2) Year Completed
Professional Services: 2013
Construction (*if applicable):*2013

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

[X] Check if project performed with current firm

The scope included a mechanical system assessment to determine what needed to be added for the proposed Arizona Opera purchase of a new building. Additional scope included a mechanical and plumbing design for the existing two story building plus a 5,000 SF addition, this required a schematic design, construction documents, and construction administration. A third scope of work was added to address additional SF and a warehouse space. All new HVAC and reconfigured plumbing was done for this addition. Specific Role included design and construction administration. Approx. 23,500 SF, Estimated Cost of Construction: $3.5 million.

3)

(1) TITLE AND LOCATION *(City and State)*
PVUSD Larkspur Elementary School – Mechanical and Plumbing Design
Phoenix, AZ

(2) Year Completed
Professional Services: 2012 - 2013
Construction *(if applicable):* 2013

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

[X] Check if project performed with current firm

The scope included design development for DX rooftop equipment, DX split system equipment, plumbing and energy management system. Schematics, equipment schedules, load calculations, ventilation calculations, construction documents and construction administration were part of the scope. Specific Role included design and construction administration. Approx. 67,000 SF. Estimated Cost of Construction: $12.3 million.

4)

(1) TITLE AND LOCATION *(City and State)*
Sun State Building – Fluid Cooler Replacement
Phoenix, AZ

(2) Year Completed
Professional Services: 2013
Construction *(if applicable):* 2013

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

[X] Check if project performed with current firm

The scope included mechanical, plumbing, and electrical plans, equipment schedules, details, specifications and CADD drafting. Specific Role included design and construction administration. Approx. 26,700 SF, Estimated Cost of Construction: $150,000.

5)

(1) TITLE AND LOCATION *(City and State)*
Phoenix Union High School – Science Labs, Phoenix, AZ

(2) Year Completed
Professional Services: 2013
Construction *(if applicable): 2013*

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

[X] Check if project performed with current firm

The scope included mechanical and plumbing design for science lab renovations at Carl Hayden, Metro Tech, and North High Schools. Field verification, construction documents, and construction administration were done. Specific Role included design and construction administration. Approx. 29,400 SF, Estimated Cost of Construction: $3.2 million.

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

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

a. TITLE AND LOCATION *(City and State)*	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Paradise Valley Unified School District No. 69 - Design for District Wide Energy Management System Upgrades (55 Buildings) Phoenix, Arizona	2008 to 2012	2009 to 2013

23. PROJECT OWNER'S INFORMATION

c .PROJECT OWNER	d .DOLLAR AMOUNT OF PROJECT	e. TOTAL COST OF PROJECT
Paradise Valley Unified School District No. 69	10 Million	10 Million

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

1. Description: This project included preparation for meetings, conduct meetings, prepare drawings, develop construction documents by school site for key energy management concepts for all 55 sites at Paradise Valley Unified School District. The project also included construction administration for all designed projects. This project is a renovation / remodel of energy management controls, mechanical systems and lighting systems which considers all energy use systems on all PVUSD sites, for all existing structures and all additions. Over 30 percent reduction in energy use has been achieved at Greenway Middle School and Shadow Mountain High School.

2. Building Data: 55 Sites.

3. Estimated Cost of Construction: $35 Million.

4. Length of Project: Five years.

5. Relevance to this Bid: An example of experience in energy conservation, mechanical engineering design and construction administration.

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

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

a. TITLE AND LOCATION *(City and State)*	b. YEAR COMPLETED	
	PROFESSIONAL **SERVICES**	CONSTRUCTION *(If applicable)*
Barrel O' Fun – Mechanical, Plumbing, Oil/Process Piping Design, Phoenix, Arizona	2008 - 2009	2010 - 2011

23. PROJECT OWNER'S INFORMATION

c .PROJECT OWNER	d .DOLLAR AMOUNT OF PROJECT	e. TOTAL COST OF PROJECT
Barrel O' Fun	12 Million	12 Million

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

1. Description: This project included mechanical / HVAC, plumbing and process piping design for an Owner to obtain a building permit on a food (potato chip) production plant in Phoenix, Arizona. The design included process piping, compressed air, gas piping, Type I hoods, oil piping ;system, and lift station design. The services included mechanical, HVAC, plumbing, process piping floor, mezzanine and roof plans. Plumbing riser diagrams, plumbing fixture schedules. Mechanical, plumbing, process piping details and isometric diagrams, schematics. Construction drawings with specifications on drawings. Gas, cooking and process oil wash down piping systems. Compressed air piping system. AutoCAD drafting.

2. Building Data: 133,000 SF.

3. Estimated Cost of Construction: $12 Million.

4. Length of Project: Three years.

5. Relevance to this Bid: A major example of natural gas and compressed air system and special piping system experience.

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)* KPNX – Mechanical / Plumbing System Renovations, Phoenix, Arizona	b. YEAR COMPLETED PROFESSIONAL SERVICES 2009	CONSTRUCTION *(If applicable)* 2009 - 2010

23. PROJECT OWNER'S INFORMATION		
c .PROJECT OWNER KPNX (Gannett)	d .DOLLAR AMOUNT OF PROJECT $800,000	e. TOTAL COST OF PROJECT $800,000

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

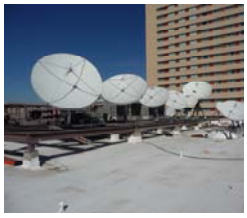
1. Description. The scope of services included a mechanical and plumbing design to address a first floor remodel, mechanical / electrical infra-structure, and relocation of a fitness center to the second floor at the Arizona Republic building. Included were project management, field verification of existing conditions, conceptual design, and vendor research. Developed control strategy, air handler design, temperature control system design, and drawings of the new system. Prepared heating, cooling, and ventilation load calculations. Associated plumbing engineering. Mechanical and plumbing schedules, details, and chiller roof plans. Building automation system I/O summaries. Isometric system diagrams for mechanical air flow and plumbing systems.

2. Building Data: 250,000 SF.

3. Estimated Cost of Construction: $800,000.

4. Length of Project: Two years.

5. Relevance to this Bid: An example of experience in renovation / replacement of a 350 ton central plant and the addition of building automation system for an *occupied* facility.



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

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

a. TITLE AND LOCATION *(City and State)*	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Regency House Condominiums – Mechanical / Electrical Design for New Central Plant, Phoenix, Arizona	2011 - 2012	2012

23. PROJECT OWNER'S INFORMATION

c .PROJECT OWNER	d .DOLLAR AMOUNT OF PROJECT	e. TOTAL COST OF PROJECT
Regency House Condominium Homeowners	1.5 Million	1.5 Million

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

1. Description: This project included a mechanical and electrical design to implement a new central plant for the existing building mechanical systems. The scope included a mechanical and electrical design for: 1) project management; 2) upgrades to the existing mechanical system including new and relocated central chiller plant including cooling tower; 3) make-up air handling unit and pump replacement; 4) design the replacement of five fan coil units on the first floor lobby area; 5) the addition of a building automation system including central chiller plant, make-up air handler, and certain pumps and boiler cooling tower and plate and frame equipment monitoring and controls.

2. Building Data: 380,000 SF.

3. Estimated Cost of Construction: $1.5 Million.

4. Length of Project: Two years.

5. Relevance to this Bid: An example of experience in renovation / replacement of a 350 ton central plant and the addition of a building automation system for an *occupied* facility.

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

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

a. TITLE AND LOCATION *(City and State)*	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Mechanical and Energy System Upgrade Design and Construction Management for PVUSD (Seven School Sites), Phoenix, Arizona	2012 - 2013	2013

23. PROJECT OWNER'S INFORMATION

c .PROJECT OWNER	d .DOLLAR AMOUNT OF PROJECT	e. TOTAL COST OF PROJECT
Paradise Valley Unified School District No. 69	2.285 Million	2.285 Million

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

1. Description: This project included a mechanical and electrical design to implement new mechanical, lighting, and energy management system replacements for seven existing school sites. The scope included a mechanical and electrical design for: 1) project management; 2) design development including preparation for meetings, research, field verification, pre-purchase packages if needed; 3) upgrades to the existing mechanical systems including HVAC and EMS system replacement at North Ranch ES; 4) EMS upgrades including building automation system renovations/replacements at Campo Bello, Copper Canyon, Desert Trails and Hidden Hills ES; 5) upgrades to the existing mechanical systems including HVAC replacements at Sonoran Sky ES; 6) lighting system upgrades at Sunset Canyon ES; and 7) construction management for construction at all seven school sites.

2. Building Data: 502,627 SF.

3. Estimated Cost of Construction: 2.285 Million.

4. Length of Project: Two years.

5. Relevance to this Bid: An example of experience in energy management systems and mechanical system upgrades.

6. ADDITIONAL INFORMATION

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

Johnston Engineering Company is a mechanical engineering company established in January 1992 which provides energy efficient:

- Heating
- Ventilating
- Air Conditioning
- Plumbing Design

In addition to design, Johnston Engineering Company offers investigative analysis and economic studies. Johnston Engineering Company is committed to high quality engineering that meets the Clients specific needs.

Johnston Engineering Company prepares designs for new and existing:

- Schools
- Hospitals
- Office Buildings
- Industrial Facilities

New designs usually incorporate the latest in energy efficient technology while maintaining an emphasis on simplicity and the Owners requirements. Existing facilities usually are renovated due to worn out equipment, non code compliant installation, changing facility use or function. We provide field investigative knowledge which creates safe, efficient, and functional interfaces between existing systems and new designs

Clients benefit from Johnston Engineering Company's involvement because of:

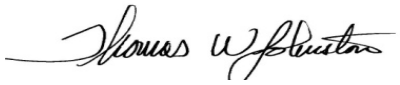
- Special Knowledge in Integrating New Systems with Existing Systems
- Attention to Detail
- Energy Efficient Designs
- Attention to Clients Needs
- Personalized Service
- Cost Effective Engineering Analysis

JOHNSTON ENGINEERING COMPANY
HEATING, VENTILATION, AIR CONDITIONING, PLUMBING

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:	53
b.	Percentage of Total Work Attributable to Non-Government Work:	47

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

Signature:  Date: December 2, 2013

Name: Thomas W. Johnston, P.E. Title: President