



ARCHITECT – ENGINEER QUALIFICATIONS

PART I – CONTRACT SPECIFIC QUALIFICATIONS

A. CONTRACT INFORMATION

1. TITLE AND LOCATION (City and State)

Electrical, Instrumentation and Telemetry Consulting Services, Palm Beach County, Florida

2. PUBLIC NOTICE DATE

3. SOLICITATION OR PROJECT NUMBER

B. ARCHITECT – ENGINEER POINT OF CONTACT

4. NAME AND TITLE

Larry M. Smith, P.E./President

5. NAME OF FIRM

Smith Engineering Consultants, Inc.

6. TELEPHONE NUMBER

(561) 616-3911

7. FAX NUMBER

(561) 616-3912

8. E-MAIL ADDRESS

larry@smithengineeringconsultants.com

C. PROPOSED TEAM

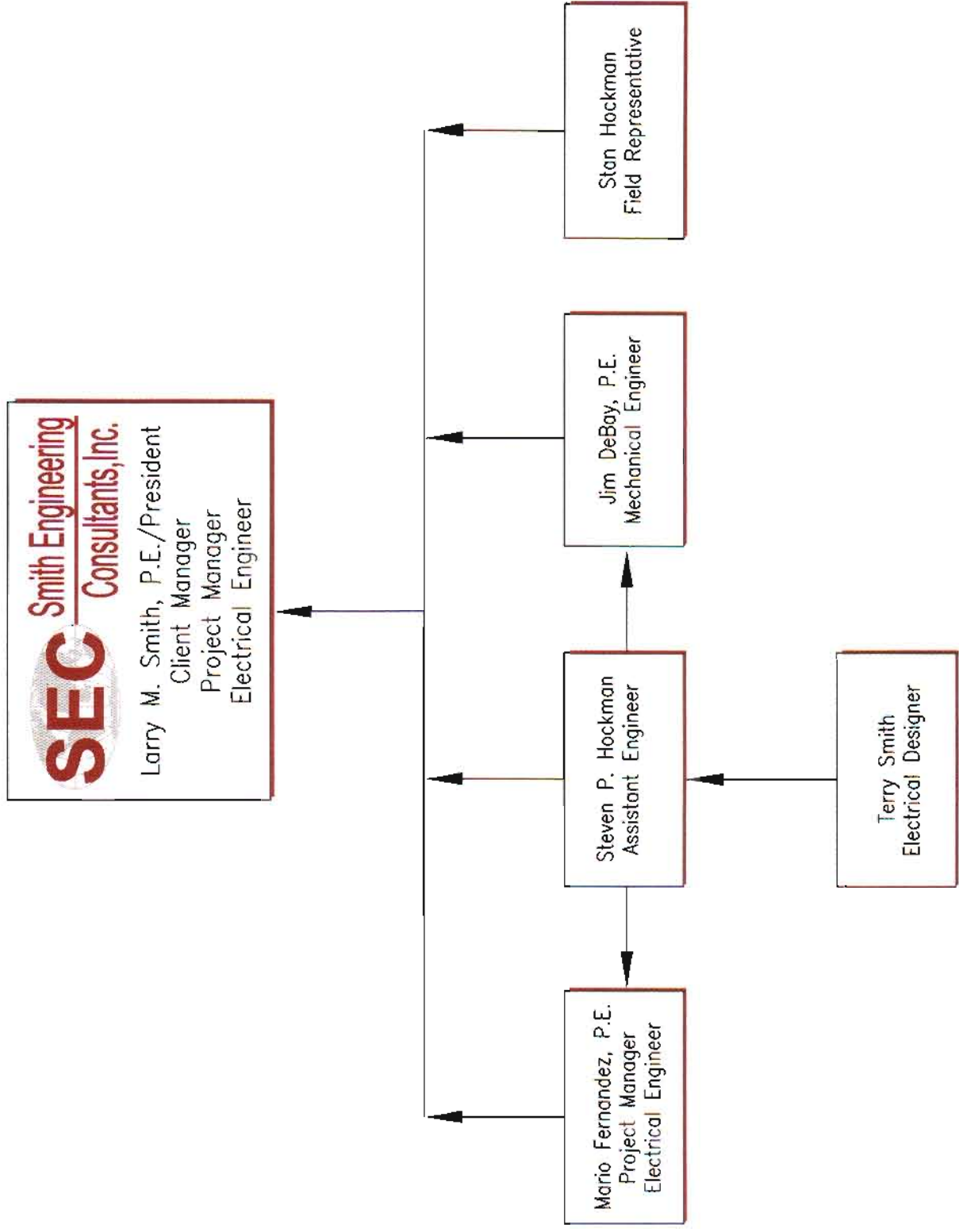
(Complete this section for the prime contractor and all key subcontractors.)

| | (Check) | | | 9. FIRM NAME | 10. ADDRESS | 11. ROLE IN THIS CONTRACT |
|----|---------|-------------|----------------|---|---|---|
| | PRIME | J-V PARTNER | SUBCON-TRACTOR | | | |
| a. | X | | | Smith Engineering Consultants, Inc. CHECK IF BRANCH OFFICE | 2161 Palm Beach Lakes Blvd., Suite 312 West Palm Beach, FL 33409 | Electrical, Instrumentation and Telemetry |
| b. | | | | CHECK IF BRANCH OFFICE | | |
| c. | | | | CHECK IF BRANCH OFFICE | | |
| d. | | | | CHECK IF BRANCH OFFICE | | |
| e. | | | | CHECK IF BRANCH OFFICE | | |
| f. | | | | CHECK IF BRANCH OFFICE | | |

D. ORGANIZATIONAL CHART OF PROPOSED TEAM

(Attached)

ORGANIZATIONAL CHART



E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

| | | | |
|---|--|----------------------|---------------------------|
| 12. NAME Larry M. Smith, P.E. | 13. ROLE IN THIS CONTRACT Electrical Engineer | 14. YEARS EXPERIENCE | |
| | | a. TOTAL 20 | b. WITH CURRENT FIRM 8 |

15. FIRM NAME AND LOCATION *(City and State)*
Smith Engineering Consultants, Inc, 2161 Palm Beach Lakes Blvd., Suite 312, West Palm Beach, FL 33409

| | |
|---|---|
| 16. EDUCATION <i>(DEGREE AND SPECIALIZATION)</i> Bachelor of Science in Electrical Engineering | 17. CURRENT PROFESSIONAL REGISTRATION <i>(STATE AND DISCIPLINE)</i> Florida/Electrical Engineering |
|---|---|

18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
Post-graduate studies at FAU in telecommunications, Tau Beta Pi (Engineering Honor Society), IEEE, Florida Engineering Society (Past President of the Palm Beach Chapter), Florida Building Code electrical technical advisory committee, FES state energy committee.

19. RELEVANT PROJECTS

| (1) TITLE AND LOCATION <i>(City and State)</i> | (2) YEAR COMPLETED | |
|--|--|-------------------------------------|
| | PROFESSIONAL SERVICES | CONSTRUCTION <i>(if Applicable)</i> |
| SPWMD Stormwater Treatment Area (STA)-1W Palm Beach County, Florida | 1999 | 2005 |
| a. (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Electrical design for the gate control structure and trash rakes. This included the electrical service and distribution, controls, lighting, instrumentation, and telemetry systems. The telemetry system was designed using the District's standard RTU design. | <input checked="" type="checkbox"/> Check if project performed with current firm | |
| SFWMD P.S. 319 Loxahatchee, Florida | 2005 | 2005 |
| b. (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Construction administration for the electrical systems of this pump station designed by the Army Corps of Engineers. We observed the electrical installations and prepared the contract record drawings for review by the Corps. Corrections were made to the electrical design drawings in accordance with the actual construction observed by us and as reported by the contractor. | <input checked="" type="checkbox"/> Check if project performed with current firm | |
| Mirasol Pump Station Palm Beach Gardens, Florida | 2001 | 2003 |
| c. (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Electrical design for a new stormwater pump station. This pump station consisted of six (6) electric motor operated pumps with both upstream and downstream water level monitoring. A backup diesel generator was designed to provide power for full pumping capacity. Reduced-voltage motor starters were designed to reduce the starting inrush current for the large electric motors. Electrical design included motor operated gates for control structures, electrical service and distribution, lighting, controls, instrumentation, and telemetry systems. | <input checked="" type="checkbox"/> Check if project performed with current firm | |
| City of Lake Worth Master Pump Station Lake Worth, Florida | 2002 | 2003 |
| d. (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Electrical design including power, controls, instrumentation and telemetry for the conversion of the existing wetwell pump station to an in-line booster station. Variable frequency drives (VFD's) were used to match the varying wastewater flow into and out of the pump station. An upgraded telemetry system was designed to replace the existing, aging system, and to provide control and status reporting to the existing central station. | <input checked="" type="checkbox"/> Check if project performed with current firm | |
| Gateway Community Development District Ft. Myers, Florida | 2004 | 2005 |
| e. (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Electrical design including power, controls, instrumentation and telemetry for the rehabilitation of an existing reclaimed water pump station. Five (5) new pumps were provided with variable frequency drives (VFD's) to provide water to the local community, including golf course irrigation. A hydropneumatic tank with an air compressor system was installed to help maintain water pressure. | <input checked="" type="checkbox"/> Check if project performed with current firm | |

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

| | | | |
|--|---|----------------------|--------------------------|
| 12. NAME James L. DeBay, P.E. | 13. ROLE IN THIS CONTRACT Mechanical Engineer | 14. YEARS EXPERIENCE | |
| | | a TOTAL 37 | b WITH CURRENT FIRM 8 |
| 15. FIRM NAME AND LOCATION <i>(City and State)</i> Smith Engineering Consultants, Inc., 2161 Palm Beach Lakes Blvd., Suite 312, West Palm Beach, FL 33409 | | | |
| 16. EDUCATION <i>(DEGREE AND SPECIALIZATION)</i> Bachelor of Science in Mechanical Engineering | 17. CURRENT PROFESSIONAL REGISTRATION <i>(STATE AND DISCIPLINE)</i> Florida/Mechanical Engineering | | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS <i>(Publications, Organizations, Training, Awards, etc.)</i> Two (2) term member of the State of Florida Board of Building Codes & Standards, National Fire Protection Association (NFPA), Past President of the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE), Co-author of the Florida Model Energy Code. | | | |

19. RELEVANT PROJECTS

| (1) TITLE AND LOCATION <i>(City and State)</i> | | (2) YEAR COMPLETED | |
|--|------|--|-------------------------------------|
| | | PROFESSIONAL SERVICES | CONSTRUCTION <i>(if Applicable)</i> |
| a. (1) TITLE AND LOCATION <i>(City and State)</i> Mirasol Pump Station Palm Beach Gardens, Florida | 2001 | 2003 | |
| (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Mechanical design for a new stormwater pump station. This pump station consisted of six (6) electric motor operated pumps with both upstream and downstream water level monitoring. A backup diesel generator was designed to provide power for full pumping capacity. Reduced-voltage motor starters were designed to reduce the starting inrush current for the large electric motors. Mechanical design included motor operated gates for control structures, air conditioning of the main electrical room, and plumbing. | | <input checked="" type="checkbox"/> Check if project performed with current firm | |
| b. (1) TITLE AND LOCATION <i>(City and State)</i> Village of Wellington Pump Station No. 6 Wellington, Florida | 2004 | 2005 | |
| (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Mechanical design for several new stormwater pump stations throughout the Village of Wellington. These pump stations consisted of electric motor operated pumps with both upstream and downstream water level monitoring. A backup diesel generator was designed at each pump station to provide power for full pumping capacity. Mechanical design included ventilation and plumbing throughout the pump stations. | | <input checked="" type="checkbox"/> Check if project performed with current firm | |
| c. (1) TITLE AND LOCATION <i>(City and State)</i> City of West Palm Beach Renaissance Pump Station West Palm Beach, Florida | 2002 | 2004 | |
| (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Mechanical design for a new stormwater pump station. This pump station consisted of three (3) electric motor operated pumps with both upstream and downstream water level monitoring. Provisions for a future backup diesel generator were designed to provide power for full pumping capacity. Mechanical design included motor operated gates for control structures, ventilation of the main electrical room, and plumbing. | | <input checked="" type="checkbox"/> Check if project performed with current firm | |
| d. (1) TITLE AND LOCATION <i>(City and State)</i> City of Lake Worth Master Pump Station Lake Worth, Florida | 2002 | 2003 | |
| (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Mechanical design for two (2) redundant air-conditioning systems to cool the electrical equipment room. These split(DX) systems were of a low profile, space saving design so as to maximize the available space for the electrical equipment. Air conditioning of the variable frequency drives (VFD's) serves to extend the life of these expensive devices. | | <input checked="" type="checkbox"/> Check if project performed with current firm | |
| e. (1) TITLE AND LOCATION <i>(City and State)</i> Gateway Community Development District Ft. Myers, Florida | 2004 | 2005 | |
| (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Mechanical design for the two (2) redundant air-conditioning systems to cool the electrical equipment room of the reclaimed water pump station. These split(DX) systems were of a low profile, space saving design so as to maximize the available space for the electrical equipment. Air conditioning of the variable frequency drives (VFD's) serves to extend the life of these expensive devices. | | <input checked="" type="checkbox"/> Check if project performed with current firm | |

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

| | | | |
|--|--|---|---------------------------|
| 12. NAME Mario Fernandez, P.E. | 13. ROLE IN THIS CONTRACT Electrical Engineer | 14. YEARS EXPERIENCE | |
| | | a. TOTAL 41 | b. WITH CURRENT FIRM 5 |
| 15. FIRM NAME AND LOCATION <i>(City and State)</i> Smith Engineering Consultants, Inc, 2161 Palm Beach Lakes Blvd., Suite 312, West Palm Beach, FL 33409 | | | |
| 16. EDUCATION <i>(DEGREE AND SPECIALIZATION)</i> Bachelor of Science in Electrical Engineering | | 17. CURRENT PROFESSIONAL REGISTRATION <i>(STATE AND DISCIPLINE)</i> Florida/Electrical Engineering | |
| 18. OTHER PROFESSIONAL QUALIFICATIONS <i>(Publications, Organizations, Training, Awards, etc.)</i> Institute of Electrical and Electronics Engineers (IEEE) | | | |

19. RELEVANT PROJECTS

| | (1) TITLE AND LOCATION <i>(City and State)</i> | (2) YEAR COMPLETED | |
|----|---|-----------------------|-------------------------------------|
| | | PROFESSIONAL SERVICES | CONSTRUCTION <i>(if Applicable)</i> |
| | Town of Palm Beach Pump Station Generators Palm Beach, Florida | 2003 | 2004 |
| a. | (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE | | |
| | <p>Electrical design, including power, controls, instrumentation and telemetry for the installation of two (2) new standby power generators and remote telemetry units (RTU's), one (1) at each of two (2) existing stormwater pump stations in the Town of Palm Beach. A new electrical service was designed at each pump station, including a new automatic transfer switch, to provide both normal and emergency power to the submersible pumps. Data Flow telemetry systems were specified to provide control and status reporting to the existing central station.</p> <p><input checked="" type="checkbox"/> Check if project performed with current firm</p> | | |
| | City of Lake Worth Water Booster Station Generators Lake Worth, Florida | 2007 | 2008 |
| b. | (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE | | |
| | <p>Electrical design, including power, controls, instrumentation and telemetry for the installation of two (2) new standby power generators and remote telemetry units (RTU's), one (1) at each of two (2) existing water booster pump stations in the City of Lake Worth. A new electrical service was designed at each pump station, including a new automatic transfer switch, to provide both normal and emergency power to the existing water booster pumps. Motorola MOSCAD telemetry systems were specified to provide control and status reporting.</p> <p><input checked="" type="checkbox"/> Check if project performed with current firm</p> | | |
| | City of Lake Worth WTP Generator Lake Worth, Florida | 2006 | 2007 |
| c. | (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE | | |
| | <p>Electrical design, including power, controls, lighting, instrumentation and SCADA for the installation of a new standby power generator to serve the existing water treatment plant. Also included within this project was the electrical design for the replacement of five (5) existing pumps and motors. New VFD's and solid-state, reduced voltage motor starters were installed within the existing motor control center to serve the pumps. A 1,000kW diesel generator was installed to provide backup power to the entire water treatment plant.</p> <p><input checked="" type="checkbox"/> Check if project performed with current firm</p> | | |
| | City of Riviera Beach Master Pump Stations Riviera Beach, Florida | 2005 | 2006 |
| d. | (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE | | |
| | <p>Electrical design, including power, controls, instrumentation and telemetry for the rehabilitation of two (2) existing wastewater pump stations No. 1A and No. 50 in the City of Riviera Beach. New VFD's were designed to control replacement pumps and motors. A new standby power generator was designed for each station to replace the existing, aging units. VFD's and instrumentation were successfully integrated into the existing SCADA/telemetry system.</p> <p><input checked="" type="checkbox"/> Check if project performed with current firm</p> | | |
| | Village of Wellington Pump Station Telemetry Wellington, Florida | 2002 | 2003 |
| e. | (3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE | | |
| | <p>Electrical design including power, controls, instrumentation and telemetry for the installation of a new telemetry system for the Village of Wellington's stormwater pump stations. A new base station including computer workstations, software, radio telemetry unit (RTU), and antenna tower were installed at the existing public works complex. RTU's were installed in the field at several pump stations. These communicated with the base station to provide remote control and status reporting for pumps, generators, water level sensors, and gates.</p> <p><input checked="" type="checkbox"/> Check if project performed with current firm</p> | | |



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

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER

1

21. TITLE AND LOCATION *(City and State)*

Flagler Drive Wastewater Pump Stations
West Palm Beach, Florida

22. YEAR COMPLETED

PROFESSIONAL SERVICES

CONSTRUCTION (if Applicable)

2002

2003

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER

City of West Palm Beach

b. POINT OF CONTACT NAME

Ken Rearden, P.E.

c. POINT OF CONTACT TELEPHONE NUMBER

(561) 822-1400

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

This award winning project included the replacement of a wastewater force main pipeline, and the rehabilitation of two (2) existing pump stations. Pump Station No. 3's submersible pumps were replaced to meet the new flow and head requirements. Control panel upgrades were designed to accommodate the parameters of the new submersible pump motors.

At Pump Station No. 5, a new electrical service (including a City-owned step-up transformer) was designed to handle the additional electrical load of the station. A replacement of the three (3) existing VFD's was accomplished within the existing motor control center. Provisions to connect a portable generator through a manual transfer switch were also provided.

Total Project Cost = \$1,300,000



25 FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

| | (1) FIRM NAME | (2) FIRM LOCATION <i>(City and State)</i> | (3) ROLE |
|----|-------------------------------------|---|------------------------|
| a. | Smith Engineering Consultants, Inc. | West Palm Beach, Florida | Electrical Engineering |
| b. | {1} FIRM NAME | {2} FIRM LOCATION <i>(City and State)</i> | {3} ROLE |



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

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER

2

21. TITLE AND LOCATION *(City and State)*

Palm Beach County LS 5243 Generator Installation
Delray Beach, Florida

22. YEAR COMPLETED

PROFESSIONAL SERVICES

CONSTRUCTION (if Applicable)

2007

2008

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER

Palm Beach County

b. POINT OF CONTACT NAME

John Rich, P.E.

c. POINT OF CONTACT TELEPHONE NUMBER

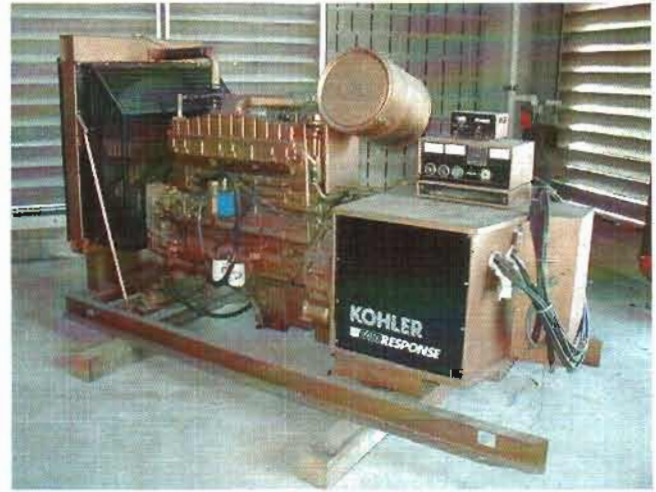
(561) 493-6116

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

The design is presently being completed for the installation of a standby power generator and diesel fuel tank at the County's existing Lift Station No. 5243. The existing chemical building is being modified to house the relocated generator. A new above ground, diesel fuel tank will be installed on site to provide adequate fuel for the required duration of operation.

A new electrical service was designed, including a new automatic transfer switch, to provide both normal and emergency power to the wastewater pumps. A new pump control panel was designed in accordance with the County's latest standards.

Total Project Cost = \$100,000



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

| | (1) FIRM NAME | (2) FIRM LOCATION <i>(City and State)</i> | (3) ROLE |
|----|-------------------------------------|---|---------------------------------------|
| a. | Smith Engineering Consultants, Inc. | West Palm Beach, Florida | Electrical and Mechanical Engineering |
| b. | (1) FIRM NAME | (2) FIRM LOCATION <i>(City and State)</i> | (3) ROLE |



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

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER

3

21. TITLE AND LOCATION *(City and State)*

Town of Palm Beach Pump Station Generators
Palm Beach, Florida

22. YEAR COMPLETED

PROFESSIONAL SERVICES

CONSTRUCTION (if Applicable)

2003

2004

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER

Town of Palm Beach

b. POINT OF CONTACT NAME

Jim Bowser, P.E.

c. POINT OF CONTACT TELEPHONE NUMBER

(561) 838-5440

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Two (2) new standby power generators and remote telemetry units (RTU's) were provided, one (1) at each of two (2) existing stormwater pump stations at Jungle Road and El Brillo Road along the intracoastal waterway in Palm Beach. Each generator consisted of a self-contained, skid-mounted, diesel fuel tank below the generator enclosed with a weatherproof, sound-attenuating enclosure.

A new electrical service was designed at each pump station including a new automatic transfer switch, to provide both normal and emergency power to the submersible pumps. Data Flow telemetry systems were specified to provide control and status reporting to the existing central station.

Total Project Cost = \$175,000



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

| | (1) FIRM NAME | (2) FIRM LOCATION <i>(City and State)</i> | (3) ROLE |
|----|-------------------------------------|---|------------------------|
| a. | Smith Engineering Consultants, Inc. | West Palm Beach, Florida | Electrical Engineering |
| b. | {1} FIRM NAME | {2} FIRM LOCATION <i>(City and State)</i> | {3} ROLE |



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

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER

4

21. TITLE AND LOCATION *(City and State)*

City of Lake Worth Master & Re-Pump Stations
Lake Worth, Florida

22. YEAR COMPLETED

PROFESSIONAL SERVICES

CONSTRUCTION (if Applicable)

2002

2003

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER

City of Lake Worth

b. POINT OF CONTACT NAME

Mike Thew, P.E.

c. POINT OF CONTACT TELEPHONE NUMBER

(561) 586-1671

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Two (2) existing wastewater pump stations were recently rehabilitated. The work included the installation of new variable frequency drives (VFD's) and remote telemetry units (RTU's) for the control of existing wastewater pumps. At the Master-Pump Station a new electrical room was enclosed and air-conditioned to house the new VFD's. The existing electrical service was modified to distribute power to the new equipment.

At the Repump Station new VFD's were installed within the pump station and fed from the existing electrical service which was modified for this purpose. Upgraded telemetry systems were designed for both stations to replace the existing, aging systems, and to provide control and status reporting to the existing central station.

Total Project Cost = \$500,000



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

| | (1) FIRM NAME | (2) FIRM LOCATION <i>(City and State)</i> | (3) ROLE |
|----|-------------------------------------|---|---------------------------------------|
| a. | Smith Engineering Consultants, Inc. | West Palm Beach, Florida | Electrical and Mechanical Engineering |



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

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER

5

21. TITLE AND LOCATION *(City and State)*

City of Lake Worth Water Booster Stations
Lake Worth, Florida

22. YEAR COMPLETED

PROFESSIONAL SERVICES

CONSTRUCTION (if Applicable)

2007

2008

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER

City of Lake Worth

b. POINT OF CONTACT NAME

Mike Thew, P.E.

c. POINT OF CONTACT TELEPHONE NUMBER

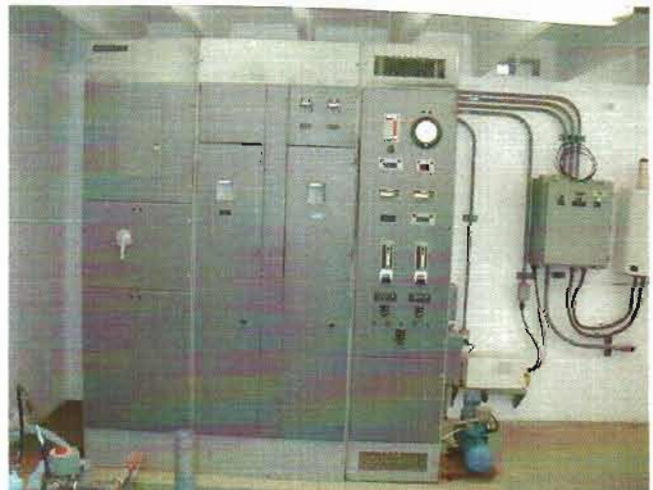
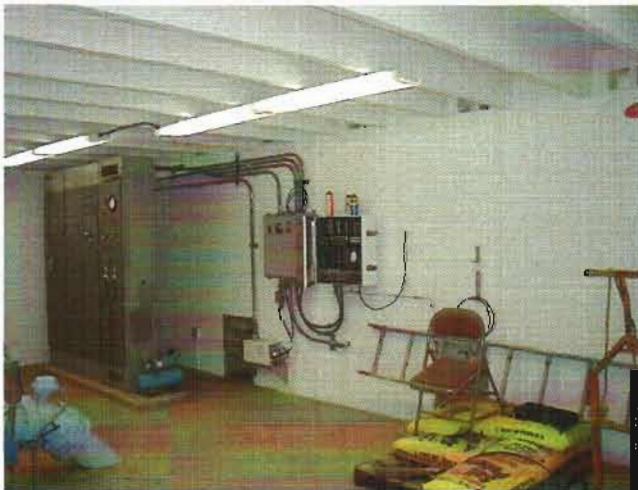
(561) 586-1671

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Two (2) new standby power generators and remote telemetry units (RTU's) were designed, one (1) at each of the two (2) existing north and south water booster stations in the City of Lake Worth. Each generator consists of a self-contained skid-mounted, diesel fuel tank below the generator enclosed with a weatherproof, sound-attenuating enclosure.

A new electrical service was designed at each pump station, including a new automatic transfer switch, to provide both normal and emergency power to the existing water booster pumps. Motorola MOSCAD telemetry systems were specified to provide control and status reporting to the existing central station.

Total Project Cost = \$250,000



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

| | (1) FIRM NAME | (2) FIRM LOCATION <i>(City and State)</i> | (3) ROLE |
|----|-------------------------------------|---|------------------------|
| a. | Smith Engineering Consultants, Inc. | West Palm Beach, Florida | Electrical Engineering |
| b. | (1) FIRM NAME | (2) FIRM LOCATION <i>(City and State)</i> | (3) ROLE |



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

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER

6

| | | |
|---|-------------------------------|--------------------------------------|
| 21. TITLE AND LOCATION (City and State) Village of Royal Palm Beach R.O. Plant Expansion | 22. YEAR COMPLETED | |
| | PROFESSIONAL SERVICES 2005 | CONSTRUCTION (if Applicable) 2006 |

23. PROJECT OWNER'S INFORMATION

| | | |
|---|---|--|
| a. PROJECT OWNER Village of Royal Palm Beach | b. POINT OF CONTACT NAME Ray Liggins, P.E. | c. POINT OF CONTACT TELEPHONE NUMBER (561) 790-5165 |
|---|---|--|

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

A new reverse osmosis system was added to the existing water treatment plant significantly increasing its capacity. New variable frequency drives (VFD's) were installed to serve the new high pressure pump and the existing transfer pump. The new VFD's were installed within the existing main electrical room and fed from the existing motor control centers.

A new odor control system was installed complete with blowers, recirculation pumps, and chemical feed pumps. The existing clearwell transfer pumps were replaced with larger motors requiring upgraded motor controls and wiring. Additional instrumentation was installed throughout the site with new programmable logic controllers (PLC's) provided for the main process equipment. These were all successfully integrated within the existing plant supervisory control and data acquisition (SCADA) system.

Total Project Cost = \$950,000



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

| | | | |
|----|--|--|------------------------------------|
| a. | (1) FIRM NAME Smith Engineering Consultants, Inc. | (2) FIRM LOCATION (City and State) West Palm Beach, Florida | (3) ROLE Electrical Engineering |
| b. | (1) FIRM NAME | (2) FIRM LOCATION (City and State) | (3) ROLE |



F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT
(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER
7

| | | |
|---|-------------------------------|--------------------------------------|
| 21. TITLE AND LOCATION (City and State) Village of Royal Palm Beach WWTP Expansion | 22. YEAR COMPLETED | |
| | PROFESSIONAL SERVICES 2001 | CONSTRUCTION (if Applicable) 2003 |

23. PROJECT OWNER'S INFORMATION

| | | |
|---|---|--|
| a. PROJECT OWNER Village of Royal Palm Beach | b. POINT OF CONTACT NAME Ray Liggins, P.E. | c. POINT OF CONTACT TELEPHONE NUMBER (561) 790-5165 |
|---|---|--|

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(include scope, size, and cost)*

A recent expansion to the existing wastewater treatment plant included the addition of a new dewatering building (including belt filter press and truck loading area), odor control system, site lift station, sodium hypochlorite structure, and effluent pump station modifications. New site lighting was installed throughout the project. A new 1,200A, 480V electrical service was designed to feed the entire plant including both existing and new electrical loads. Complex control, instrumentation, and SCADA systems were provided and integrated into a new plant control system.

Smith Engineering Consultants designed all of the electrical systems, including power, lighting, controls, instrumentation, and SCADA for an even more recent plant expansion. This expansion included the addition of a new pre-treatment (headworks) structure, equalization basin, aerobic digester, two (2) new clarifiers, and effluent pump station modifications. This expansion was never constructed because of Palm Beach County's acquisition of the Royal Palm Beach utilities.

Total Project Cost = \$2,300,000



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

| | (1) FIRM NAME | (2) FIRM LOCATION (City and State) | (3) ROLE |
|----|-------------------------------------|------------------------------------|------------------------|
| a. | Smith Engineering Consultants, Inc. | West Palm Beach, Florida | Electrical Engineering |
| b. | (1) FIRM NAME | (2) FIRM LOCATION (City and State) | (3) ROLE |



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

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER

8

| | | |
|---|-----------------------|------------------------------|
| 21. TITLE AND LOCATION (City and State) City of Lake Worth Water Treatment Plant Generator | 22. YEAR COMPLETED | |
| | PROFESSIONAL SERVICES | CONSTRUCTION (if Applicable) |
| | 2006 | 2007 |

23. PROJECT OWNER'S INFORMATION

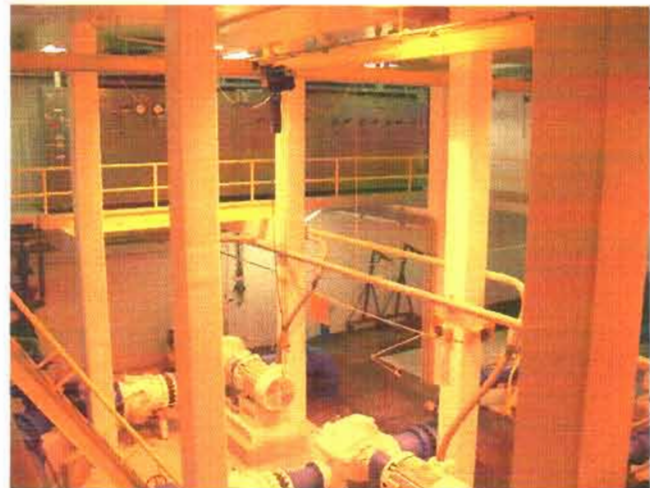
| | | |
|--|---|--|
| a. PROJECT OWNER City of Lake Worth | b. POINT OF CONTACT NAME Mike Thew, P.E. | c. POINT OF CONTACT TELEPHONE NUMBER (561) 586-1671 |
|--|---|--|

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(include scope, size, and cost)*

A new electrical building was constructed to house the new main electrical service and standby power generator for the existing water treatment plant in Lake Worth. New high service pumps and motors were installed to replace the existing, aging pumps and motors. Two (2) new variable frequency drives (VFD's) and three (3) new solid-state, reduced voltage motor starters were installed within the existing motor control center to serve the pumps. Air conditioning was provided to cool the VFD's. Electrically operated valves for the high service pumps were successfully integrated into the motor control scheme. Operation of the VFD's was integrated into the existing plant SCADA system.

A 1,000 kW diesel generator was installed to provide backup power to the entire water treatment plant. A new 1,600A, 480V electrical service, including an automatic transfer switch, was designed for the plant. All of this equipment was housed within the new electrical building constructed on the site.

Total Project Cost = \$1,300,000



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

| | (1) FIRM NAME | (2) FIRM LOCATION (City and State) | (3) ROLE |
|----|-------------------------------------|------------------------------------|---------------------------------------|
| a. | Smith Engineering Consultants, Inc. | West Palm Beach, Florida | Electrical and Mechanical Engineering |
| b. | (1) FIRM NAME | (2) FIRM LOCATION (City and State) | (3) ROLE |

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION REQUESTED BY THE AGENCY. ATTACH ADDITIONAL SHEETS AS NEEDED.

Smith Engineering Consultants, Inc. is a multi-discipline engineering firm with an in-depth knowledge of energy, water, telecommunications, and architectural projects. At SEC, we approach our business just as you do, focusing on our customers and the various environments in which they operate.

SEC places a strong emphasis on creating productive working relationships with clients. Because we believe that teamwork is the key to success, our professionals are committed to responsive service, attention to detail, and effective communication and cooperation.

Our staff has built a deserved reputation for completing assignments in a cost-effective and timely manner. We've accomplished this through innovative thinking, careful planning, and professionals who believe in quality and hard work.

As Florida continues to experience tremendous growth, capital improvement projects will remain in the forefront of municipal infrastructure improvement efforts. The staff at Smith Engineering Consultants has played an important role in the design, construction, and renovation of facilities throughout the state. Our knowledge of facilities and agencies in Palm Beach, Martin, and St. Lucie Counties is particularly notable, due to our more than 30 years of experience here in south Florida.

Public facilities require complex electrical and mechanical systems, including HVAC, plumbing, power, lighting, controls, instrumentation, and telemetry. You can turn to SEC for expertise in the design of these elements.

Cost-effective design is the key to success for today's municipal infrastructure projects. Understanding that funding usually comes from a county or city's own tax base, our staff approach every design from a "Total Project" perspective. We will provide the most cost-effective and efficient design for the long term, always looking hard at the client's operation and maintenance costs.

I. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts

31 SIGNATURE

32. DATE

33. NAME AND TITLE

Larry M. Smith, P.E./President



ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER (if any)

PART II – GENERAL QUALIFICATIONS

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

| | | | |
|--|-----------------|--|-----------------|
| 2a. FIRM (OR BRANCH OFFICE) NAME Smith Engineering Consultants, Inc. | | 3. YEAR ESTABLISHED 1999 | 4. DUNS NUMBER |
| 2b. STREET 2161 Palm Beach Lakes Blvd., Suite 312 | | 5. OWNERSHIP | |
| 2c. CITY West Palm Beach | 2d. STATE FL | 33409 | |
| 6a. POINT OF CONTACT NAME AND TITLE Larry M. Smith, P.E., President | | a. TYPE Corporation | |
| 6b. TELEPHONE NUMBER (561) 616-3911 | | 6c. E-MAIL ADDRESS lsmithpe@aol.com | |
| 8a. FORMER FIRM NAME(S) (if any) | | 8b. YR. ESTABLISHED | 8c. DUNS NUMBER |
| | | | |

| 9. EMPLOYEES BY DISCIPLINE | | | | 10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS | | |
|----------------------------|------------------------|---------------------|------------|--|--|-------------------------------------|
| a. Function Code | b. Discipline | c. No. of Employees | | a. Profile Code | b. Experience | c. Revenue Index Number (see below) |
| | | (1) FIRM | (2) BRANCH | | | |
| 02 | Administrative | 1 | | A05 | Airports; Nav aids; Airport Lighting | 1 |
| 08 | CADD Technician | 2 | | C18 | Cost Estimating | 1 |
| 21 | Electrical Engineer | 2 | | D03 | Desalination | 1 |
| 42 | Mechanical Engineer | 2 | | E03 | Electrical Studies and Design | 1 |
| 15 | Construction Inspector | 1 | | H04 | Heating; Ventilating; Air Conditioning | 1 |
| | | | | L06 | Lighting (Exteriors; Streets; Memorials; | 1 |
| | | | | P07 | Plumbing & Piping Design | 1 |
| | | | | P12 | Power Generation, Transmission, Dist. | 1 |
| | | | | S13 | Storm Water Handling & Facilities | 1 |
| | | | | A12 | Automation; Controls; Instrumentation | 1 |
| | | | | C04 | Chemical Processing & Storage | 1 |
| | | | | B02 | Bridges | 1 |
| | | | | C08 | Codes; Standards; Ordinances | 1 |
| | | | | C17 | Corrosion Control; Cathodic Protection; | 1 |
| | | | | D04 | Design-Build – Preparation of Requests for | 1 |
| | | | | F03 | Fire Protection | 1 |
| | | | | F05 | Forensic Engineering | 1 |
| | | | | S04 | Sewage Collection, Treatment and Disposal | 1 |
| | | | | S07 | Solid Wastes; Incineration; Landfill | 1 |
| | | | | H07 | Highways; Streets; Airfield Paving; Parking | 1 |
| | Other Employees | 0 | | W03 | Water Supply; Treatment and Distribution | 1 |
| | Total | 8 | | R04 | Recreation Facilities (Parks, Marinas, Etc.) | 1 |

| | | | |
|--|---|--|---|
| 11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS (Insert revenue index number shown at right) | | PROFESSIONAL SERVICES REVENUE INDEX NUMBER | |
| a. Federal Work | 1 | 1. Less than \$100,000 | 6. \$2 million to less than \$5 million |
| b. Non-Federal Work | 4 | 2. \$100,000 to less than \$250,000 | 7. \$5 million to less than \$10 million |
| c. Total Work | 4 | 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 |

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

| | |
|---|---------|
| a. SIGNATURE | b. DATE |
| c. NAME AND TITLE Larry M. Smith, P.E./President | |