

CITY OF HOLLYWOOD DEPARTMENT OF PUBLIC UTILITIES ENGINEERING AND CONSTRUCTION SERVICES DIVISION

Bid Package submitted by: Solutionwerks, Inc.

SECTION 00030

NOTICE TO BIDDERS

PROJECT NAME:

CRYOGENIC PLANT TURNAROUND MAINTENANCE - YEAR 2016

PROJECT NUMBER:

16-9415

NOTICE IS HEREBY GIVEN that the City Commission of the City of Hollywood, Florida, is advertising for sealed bids which shall be <u>submitted to the City Clerk's Office</u> (City Hall, 2600 Hollywood Blvd., Room 221) of the City of Hollywood, Florida, <u>until 2:00 p.m.</u>, local time, <u>August 25, 2016</u>. On <u>August 25, 2016</u> at 2:30 a.m. the bids will be opened and read publicly in the Department of Public Utilities, Engineering and Construction Services Division Conference Room at 1621 N. 14th Avenue, Building A, Hollywood, Florida.

A pre-bid conference will be held on August 4, 2016 at 2:00 p.m., at the Southern Regional Wastewater Treatment Plant, located at 1621 North 14th Avenue, Hollywood, Florida, 33020, ECSD Conference Room, Building A.

The Bid Package and Contract documents can be downloaded at: www.hollywoodfl.org/Purchasing/Bids
The Bid Package and Contract documents may also be obtained, upon request, at a cost of \$200 from the Department of Public Utilities - ECSD at 1621 North 14th Avenue in Hollywood. Technical assistance shall be submitted in_writing, by August 18, 2016 to the Senior Project Manager, Feng Jiang, P.E., fjiang@hollywoodfl.org

Each bid must be accompanied by a Bid Security in an amount no less than ten percent (10%) of the bid amount. Said security shall be in the form of a Certified Check or Cashier's Check on a solvent National or State Bank, or a bid bond executed by the Bidder and a qualified Surety, satisfactory and payable to the City of Hollywood, Florida.

A Cone of Silence is in effect with respect to this bid. The Cone of Silence prohibits certain communications between potential vendors and the City. For further information, please refer to Section 30.15(E) of the City's Code of Ordinances.

The City of Hollywood is strongly committed to ensuring the participation of local Hollywood vendors in the procurement of goods and services. For additional information about the City's Local Preference Ordinance, visit www.hollywoodfl.org.

It will be the Bidder's sole responsibility to <u>hand-deliver</u> or <u>mail</u> his/her proposal to the City Clerk's Office at City Hall on or before the closing hour and date for the receipt of bids as noted above.

The City Commission reserves the right to reject any or all bids, to waive informalities and to accept or reject all or any part of any bid, as they may deem to be in the best interest of the City of Hollywood, Florida.

Dated this 22nd Day of July, 2016

CITY OF HOLLYWOOD, FLORIDA

Jitendra Patel, P.E., Assistant Director Department of Public Utilities - ECSD

SECTION 11001

FIVE YEAR MAINTENANCE TURNAROUND SERVICES FOR CRYOGENIC OXYGEN PLANT

1.0 BACKGROUND

1.1 General

The City of Hollywood (City) is soliciting written proposals from qualified contractors for the provision of supervision, maintenance services, and applicable subcontract services for the work tasks associated with a five year turnaround of the cryogenic oxygen plant at the Wastewater Treatment Plant as described in this Request for Proposals.

Reimbursement for work completed as set forth in the Scope of Work Appendix attached hereto will be on a lump sum guaranteed fixed price basis. Reimbursement for any work authorized by written change order will be on an hourly rates and cost plus mark-up basis. A complete breakdown of the hourly rates applicable to Contractor and Subcontractor services, equipment, and materials must also be submitted with the proposal for this purpose.

1.2 Oxygen Plant Description

The City has a Union Carbide U-63 Union Carbide cryogenic oxygen generation plant constructed in 1975 designed to produce oxygen gas (95% average purity) for the activated sludge waste treatment process. When operating on a single main air compressor, the plant is capable of producing approximately 50 T/D of gaseous oxygen and 2 T/D of liquid oxygen for storage as a backup supply of oxygen during outages of the cryogenic plant. The production limits are higher (65+ T/D) when operating on two main air compressors. The primary equipment includes:

- a. Three 800 HP TA6000 3-stage Ingersoll Rand/Cameron/Joy centrifugal air compressors.
- Cryogenic air separation unit housed in a perlite insulated "cold box", including reversing heat exchangers, subcoolers, gel traps, distillation columns, a reboiler-condenser, and expansion turbine.
- c. Two 15,000 gallon liquid oxygen storage tanks and three ambient vaporizers, designed for three to four days' supply under normal conditions when the plant is out of service and as a supplement when the peak demands for oxygen are higher than the plant's maximum capacity.

The plant was refurbished in 2010 by Air Products and Chemicals, Inc. including a PLC based instrumentation and control system, new main air compressors, turbine, main reversing heat exchanger and back-up LOX vaporizers.

Continued operation of this plant is critical to the achievement of proper wastewater

treatment and compliance with the City's discharge permit. The services requested under this Request for Proposals must be completed in a maximum of fourteen (14) contiguous days from shutdown of the plant to restoration of oxygen production.

1.3 Purpose of Request

The City intends to perform a five year maintenance turnaround for the cryogenic plant and to replace the nitrogen superheater. The City is requesting proposals for the provision of qualified personnel to perform the maintenance tasks and provide the specialized subcontract services described in the Appendix - Scope of Work.

2.0 QUALIFICATIONS

2.1 Criteria

- Bidder must have at least five years' experience providing maintenance and turnaround services, both annual and five year, for Union Carbide U-series cryogenic oxygen plants. Bidders' experience record must include U-plant shutdowns, cold thaws, warm thaws, purges, cooldowns and start-up.
- b. Bidder must have demonstrated proficiency with the rebuilding, calibration and testing of all types of valves, transmitters, switches, flow meters, and miscellaneous instruments utilized in cryogenic oxygen plants and must possess the requisite test instruments to complete such calibrations.
- Bidder must have demonstrated proficiency with pressure vessel and process piping pneumatic leak detection.
- d. Bidder and/or its named subcontractor(s) must have demonstrated proficiency repairing pressure vessels and heat exchangers in cryogenic oxygen plant cold boxes and must be proficient in all position welding of aluminum process piping and structural supports as well as carbon steel enclosures.
- e. Bidder and/or its named subcontractor(s) must be able to apply an ASME "R" stamp to completed pressure vessel repairs and provide ASME nameplate(s) as necessary.
- f. Bidder must have demonstrated proficiency in confined space entry repairs and equipment replacement.
- g. Bidder must have demonstrated proficiency in crane management and heavy lift rigging.

2.2 Documentation

The Bidder shall provide the following information with the bid regarding its qualifications:

Description of the Bidder's capabilities and resources available for execution of the work described herein.

A list of a minimum of five (5) recent cryogenic oxygen plant maintenance

projects completed by Bidder that are similar in size and scope to this project. This list of projects shall include the following information for each project listed:

- Name, address, and phone number of the Municipality or plant owner.
- Name, fax number, email address and phone number of a representative of the Municipality or owner who is knowledgeable about the project.
- Type of oxygen plant, size of plant and purpose for which plant is used.
- 4) Brief description of the services provided, involvement of any subcontract services, and the duration of the contract.
- 5) Date of completion.
- c. Resumes of the Bidder's Project Manager and key technical and operations personnel to be assigned to this project.
- d. The Bidder shall provide the following:
 - Full office address, and phone and fax numbers of the Proposer.
 Name and phone number of the principal contact that can answer questions concerning the proposal.
 - A statement of when the company was organized and how long the company has been operating under the present business name. If a corporation, state when the company was incorporated.
 - The names and addresses of all subcontractors, statements of qualifications pertaining to the subcontractors, and a description of their respective roles in the project.
 - 4) A statement as to whether the company has been terminated for any reason or has ever failed to complete a contract for oxygen plant maintenance services. If so, state the name of the Owner and a description of the circumstances.

3.0 PROJECT APPROACH

The Bidder shall provide a complete description of its plan for supervision of the five year turnaround services, coordination of activities by subcontractors, preparations for shut down, and the anticipated completion schedule.

4.0 CONTINGENCY PLAN

The Bidder shall provide a written Contingency Plan that addresses, as a minimum, the following circumstances:

- 4.1 Abnormal weather conditions that could interrupt the five year turnaround services.
- 4.2 Changes in Contractor's personnel that could disrupt the five year turnaround services.
- 4.3 Inability to acquire appropriate parts for the five year turnaround services.

6.0 ADDITIONAL TERMS

- 6.1 The work shall be performed before substantial completion deadline.
- Any additional work not included in the Appendix must be mutually agreed upon by Contractor and the City and authorized by written change order and shall address the impact on cost, schedule, and any other affected provisions of the Contract.
- 6.3 Contractor shall conduct the work tasks in this contract in compliance with all applicable federal, state, and local laws, regulations, permits, and approvals.
- 6.4 Contractor shall set the work hours on a daily basis as agreed with City representatives and will provide supervision as required for all hours worked. City personnel are present at the waste treatment facility 24-hours a day.
- 6.5 Contractor shall provide adequate supervision, including technical and managerial oversight of the Contractor's employees and subcontractors.
- The Contractor shall not transfer or assign any interest in this contract to another party or person without the prior written consent of the City.

APPENDIX

SCOPE OF WORK

TECHNICAL AND MAINTENANCE SERVICES

CRYOGENIC OXYGEN PLANT FIVE YEAR TURNAROUND

1.0 CONTRACTOR SUPPLIED SERVICES

Contractor shall provide supervision, labor, equipment, materials, insurance, and other related services as needed to perform the work described here. All work is to be completed by Contractor and/or its subcontractors except as noted in the work descriptions.

1.1 Pre-Shutdown Coordination

Contractor shall meet on-site with City representatives to coordinate all activities to take place during the five year turnaround maintenance. The responsibilities of each party shall be reviewed and agreed upon.

All materials, parts, tools, etc. required during the turnaround will be located and inspected to ensure their suitability for the work to be completed.

The scope and extent of subcontracted work will be reviewed and subcontractors' schedule to perform the work will be agreed upon.

Any and all other aspects of the turnaround maintenance will he reviewed, and both parties shall be satisfied that all preparations have been made, all subcontractors are ready, all materials are available, and all other issues are resolved prior to shutdown of the oxygen plant.

The Contractor will arrange for and complete retesting and certification of safety relief valves associated with the LOX back-up system (storage tanks and vaporizers) and complete other maintenance for the LOX back-up system as described herein prior to the start of the five year turnaround tasks to ensure an uninterrupted supply of back-up oxygen during the turnaround.

1.2 Cold Plant Thaw

The Contractor shall check the LOX back-up system, the back-up instrument air system, and the thaw heater for proper operation in advance of the shutdown. Any deficiencies must be addressed prior to shutdown of the oxygen plant.

Upon shutdown of the oxygen plant by Contractor, Contractor shall drain all liquids from the cold box, conserving as much as possible by transferring LOX to storage, complete a cold thaw and warm all cold box equipment to near ambient temperature.

1.3 Removal and Temporary Storage of Perlite from Cold Box

Contractor shall provide services for the removal and temporary storage of perlite from the cold box. Perlite currently contained in the cold box was new in 2014 and may be re-used.

Any subcontractor(s) proposed for this work shall be approved by City prior to the start of work.

All equipment and materials needed for the removal and temporary storage of perlite shall be supplied by Contractor and/or subcontractor.

The Contractor shall coordinate lock-out and tag-out requirements for the cold box to ensure a safe working environment for all personnel. As a minimum, this will include lock-out and tag-out of the main air compressors and of the LOX Add and Make lines entering the cold box.

Perlite shall be stored on site and protected for re-use. The City and the Contractor shall agree on an onsite storage location.

1.4 Confined Space Entry/Rescue Team

Contractor shall provide qualified personnel and equipment to supervise and inspect the confined space entry necessitated by the scope of work required for this project. The Contractor shall provide a confined space rescue team as required by OSHA for work of this type.

1.5 Wash Down Cold Box and Turbine Box Interiors

Contractor shall provide services for wash down of cold box interior. Contractor is to provide all required hoses, fittings, etc. The City will provide pressurized water from a hydrant within 100 feet of the cold box as well as a vacuum truck for vacuuming water and waste perlite from the floor of the cold box after washdown. The City will dispose of the waste water after vacuuming.

1.6 Temporary Cold Box Lighting

Contractor shall provide and install temporary lighting as needed in the interior of the cold box to facilitate the maintenance to be performed under this project.

1.7 Inspect and Clean Surge Tank

Contractor shall supervise City personnel who will open the man-way of the main air surge tank, inspect the de-mister pads to ensure they are in their proper position and are undamaged, and clean accumulated debris from the floor of the tank. The condensate drain piping shall be flushed by City personnel to ensure there is no blockage. After inspection and cleaning, the man-way will be re-installed by City personnel with a new gasket provided by the City.

City personnel, working under Contractor supervision, will inspect and clean the surge tank drain piping and condensate trap to ensure proper drainage during normal operation.

1.8 Recertify Pressure Relief Valves

All pressure relief valves associated with the main air compressors, cryogenic plant and LOX back-up system are to be removed and recertified for the designated set pressure for each device. Metal tags shall be attached and sealed to each relief valve indicating the recertification pressure, date and performing company.

After recertification, each valve is to be re-installed by Contractor in its previous location with new thread sealant and/or gasket materials suitable for the service requirements. Any valves in oxygen service must be maintained in an oxygen clean state and recleaned if necessitated by the handling or recertification process.

1.9 Rebuild Switch Valves

Contractor shall remove and rebuild the four 12" Jamesbury butterfly switch valves. Seat rings and shaft packings will be replaced in the valve bodies and the pneumatic actuators will be rebuilt with standard rebuild parts kits.

Shaft bearings in the valve bodies will be checked for excessive wear. If bearings are found to be defective, the entire valve body must be replaced since bearings are non-serviceable in the field. Spare valve bodies will be made available by the City.

Replacement parts and gaskets will be provided by the City. Following re-assembly, valves will be stroked/tested to ensure smooth operation and valve stops will be adjusted as necessary for leak-free closure and maximum seat life under high cycle operating conditions.

1.10 Replace Cold End Check Valves

Contractor shall replace the four cold end check valves (two 10" and two 12") in the interior of the cold box with new valves supplied by the City. Prior to installation, the new valves are to be leak checked with clean water to ensure zero or near zero leakage. A leak rate of less than five drops of water per minute would be considered acceptable. If a greater leak rate is observed, the valve seats and/or plates must be repaired by the Contractor or manufacturer as needed to achieve an acceptable leak rate.

Valves are to be checked for cleanliness and installed using new cryogenic grade gaskets supplied by the City.

1.11 Replace Nitrogen Superheater

The nitrogen superheater in the cold box failed in 2014 and was replaced with a temporary, under-sized unit originally purchased by another municipality for a smaller cryogenic plant. A new, properly sized unit has been purchased by the City and is now available for installation. The aluminum process piping attached to the under-sized superheater shall be cut and the superheater shall be removed through an opening to be cut by Contractor in the outer wall of the cold box.

The new superheater will be inspected to verify the integrity of its nitrogen purge prior to cutting stub ends from its nozzles. If the superheater does not have at least 5 psig pressure on each of its passages prior to cutting, each passage must be pneumatically leak checked at a minimum pressure of 10 psig to verify its leak

integrity. At pressure, all surfaces and joints of the superheater will be sprayed with a soap solution to inspect for leaks.

After preparation for installation, the superheater will be lifted, guided and lowered into position and then re-attached to its associated process piping. The superheater has been pre-cleaned for oxygen service and must be maintained in an oxygen-clean state during handling and installation. Any contamination of open nozzles, etc. must be re-cleaned as necessary prior to installation to ensure safe operation. Following re-attachment of the process piping, the superheater and its attached piping will be re-tested pneumatically and inspected with a soap solution to ensure zero leakage.

1.12 Leak Check Upper/Lower Columns and Heat Exchangers

After replacement of the nitrogen superheater and rebuilding the cold end check valves, a leak check of the upper and lower columns along with the various heat exchangers in the cold box is to be conducted by Contractor. The shelf and kettle transfer valves as well as the turbine block valves should be closed. All four switch valves along with the product oxygen and vent oxygen valves, the LOX Add and Make valves, and all upper column vents and drains are also to be closed.

With all valves closed and a main air compressor operating at 50 to 60 PSIG discharge pressure, the air switch valve bypass valves (A and B pass) are to be opened one at a time with a vent on the opposing passage open. With the upper (low pressure) column thus isolated, there should be little to no air vented from the low pressure passage during this procedure.

Repeat the above test procedure, substituting the oxygen vent for the A or B pass vent. There should be little or no air vented from the oxygen vent during this procedure.

Under such test conditions, it is not unusual to find leaks past valve seats. It is, therefore, unlikely that a perfect test result, i.e. zero venting, will be achieved. If a substantial volume of air vents from the low pressure passage, the vent should be closed to measure the rate of pressure rise in the upper column. If the upper column pressure increases at a rate greater than 1 PSIG in five minutes, this will be considered a failed test and warrant further investigation. The location of such a leak could be at one or more of the process valves, an inter-passage leak in one of the heat exchangers (including the main condenser), and/or an internal leak between the upper and lower columns.

In the event of failure of the column/heat exchanger leak test, further investigation shall be carried out by Contractor to verify the source of the leak. The Contractor may use whatever means are needed, up to and including cutting and blanking process piping, to verify such source and to develop a plan of action for repair.

Contractor must be prepared to undertake any repair needed, including aluminum pressure vessel and/or heat exchanger cutting and welding, to stop the leaks such that the operation of the cryogenic process is unimpeded. Should vessel repairs be required, repairs shall be carried out in such a manner that the structural integrity of the vessel and/or support structures is not compromised during the repair process and that all work is completed safely. Contractor shall be responsible for any temporary lighting, ventilation, and/or other provisions as needed to ensure

personnel safety throughout the repair process.

Upon completion of repairs, the column leak check procedure must be completed to verify success. Should any pressure vessel be breached during the repair process, Contractor shall obtain ASME "R" stamp approval from an authorized inspector and apply an "R" stamp on a stainless steel plate welded to the ASME plate on the exterior of the cold box.

The cost for any process leak investigation beyond the initial leak check and repairs as described above shall be considered outside the base scope of work and shall be authorized by the City via change order prior to the start of repairs.

1.13 Miscellaneous Cold Box Maintenance

Both the cold end and recirculating gel traps must be topped off with new silica gel. Silica gel (Type A white, 2 to 5 mm, up to 300 lbs.) shall be provided by the Contractor. New cryogenic grade gaskets are to be installed under the stay-full blind flanges after filling.

Inspect all main and turbine box valve boots. Replace any that may be leaking or likely to leak within the next five year turnaround cycle.

Inspect and verify the operation of all thermocouples and RTD's in the interior of the cold box, including the Delta T measurement system. Any improperly supported wires, loose connections, damaged elements, etc. must be repaired and/or replaced.

Verify the integrity of the cold box purge system. There should be no damaged piping, valves, nozzles and/or supports. Make repairs as needed.

Test and calibrate, as needed, the cold box purge pressure gauges. Verify that the gauge pressure ports are free flowing.

Inspect the cold box casing to ensure there are no cracks or other structural defects. Make repairs as needed.

1.14 Leak Check Cold Box

After completion of check valve installation and topping off of gel traps (reference Articles 1.11 and 1.12 above), a pneumatic leak check of all internal cold box circuits must be performed at a minimum of 5 psig using a water based soap solution. There must be no process leaks anywhere in the interior of the cold box. The formation of any bubbles that grow in size shall be considered a leak and will necessitate repair as needed to eliminate the leak.

1.15 Stroke Pneumatically Operated Valves

Stroke all pneumatically actuated valves, including inlet guide vanes on the three main air compressors and expansion turbine, to verify fully closed and 100% open positions. If valves do not travel thru the full range of motion, adjust actuator and/or positioner as needed to achieve full range. Verify smooth operation thru the full range and that valves are firmly seated in the closed position.

Inspect actuators for signs of water and/or oil contamination and/or abnormal wear due to the reliance on back-up instrument air since the last annual turnaround. If actuators are in need of repair, rebuild as necessary using parts to be provided by the City.

Verify that compressor inlet guide vanes remain approximately 10% open in the closed position to enable positive air flow during compressor start-up.

1.16 Instrumentation Calibration

All transmitters and switches throughout the cryo plant are to be calibrated and ranged to the current plant standards and loop checked back to the PLC HMI to verify proper operation. Any repairs needed such as tubing leaks, electrical open circuits, etc. are to be completed at this time. Should any devices, such as transmitters and/or switches be found defective, replacements are to be made and the costs thereof shall be considered outside the base scope of work and authorized by the City via change order.

1.17 Main Air Compressor Maintenance

Maintenance for the three main air compressors is to be completed by City personnel working under Contractor supervision as described below:

- Replace the inlet filter elements (supplied by City), as required.
- b. Clean compressor inter, after and oil coolers via chemical flushing.
- c. If oil has not been changed within last five years, drain and refill with new oil conforming to the manufacturer specifications.
- d. Replace the lube oil filters (supplied by City).
- e. Check for and repair as needed any water leaks found.

1.18 Turbine Maintenance

Maintenance for the expansion turbine is to be completed by City personnel working under Contractor supervision as described below:

- a. Check the pressure in the oil accumulator bladder and re-pressurize, with oil pump shut off, to 50 PSIG if necessary.
- If oil has not been changed within last five years, drain and refill with new oil conforming to the manufacturer specifications.
- Replace the lube oil filter (supplied by City).
- d. Check the condition of oil transfer hoses and replace if needed (supplied by City).
- e. Clean oil cooler via chemical flushing.
- f. Check for and repair as needed any water leaks found.

1.19 Seal Cold Box and Re-Install Perlite

A final inspection of the cold box is to be completed to ensure that all temporary equipment and fixtures have been removed, all debris has been cleared, all temperature indicators are still in working order, and that all openings have been properly sealed. The perlite previously removed will then be re-installed. Contractor shall provide additional new perlite to completely top off the cold box such that it is filled to the fill port on the roof of the cold box.

1.18 LOX Back-up System Maintenance

- Contractor shall provide a suitable vacuum pump and restore the vacuum levels of both LOX storage tanks to 20 microns Hg or less during the maintenance turnaround.
- b. All valve and instrument maintenance as prescribed for the rest of the cryogenic plant is to be completed for the LOX back-up system as well prior to plant shutdown. Such maintenance is to be coordinated with the City and completed in such manner that does not impair the delivery of back-up gaseous oxygen to the waste treatment process.

1.19 Cooling Water System Maintenance

- a. The cooling tower sump is to be drained and pressure washed, along with the tower fill, by City maintenance personnel.
- b. The cooling tower fan gearbox oil is to be checked and topped off by City maintenance personnel as needed with manufacturer recommended lubricant.
- c. Cooling water pump bearings are to be lubricated by City maintenance personnel with manufacturer recommended lubricant

1.20 Plant Restart

Upon completion of all required maintenance, Contractor shall restart the oxygen plant upon completion of five year turnaround maintenance. A warm plant thaw, purge, and cool down shall be completed. All prescribed guidelines by the original equipment manufacturer, Union Carbide Corporation, are to be followed throughout the start-up procedure.

1.21 Reporting

Contractor shall maintain a log of work completed and shall prepare and submit a summary report of work completed to the City within 30 days of completion of the turnaround maintenance services.

2.0 CITY SUPPLIED SERVICES

In addition to the tasks to be performed by City personnel as outlined in Section 1.0 above, City personnel will provide the following services during the five year turnaround maintenance:

2.1 Liquid Oxygen Supply

The City will arrange for delivery of liquid oxygen to maintain a suitable inventory of processes as required during the shutdown and for restart of the cryogenic plant upon completion of five year turnaround maintenance. Contractor shall assist the City in planning the volumes required and delivery times. City personnel will be responsible for operating and maintaining the LOX back-up system during the turnaround.

2.2 Staging Area

The City will provide suitable designated staging and storage areas for the Contractor's and subcontractors' equipment when performing the City's work.

2.3 Utilities

The City will provide on-site utilities such as water, compressed air, 120/1/60 and 480/3/60 power, and lavatory facilities as needed to complete the work tasks.

2.4 Parts and Materials

The City will provide all replacement parts and materials, including the replacement nitrogen superheater, needed for the turnaround work with the specific exception of silica gel and perlite insulation as delineated in Contractor's Scope of Work above. Such parts and materials will be provided free issue to Contractor during the course of work as needed.

2.5 Materials Receiving and Storage

The City will receive, off load, and store materials as required by Contractor prior to and during the turnaround. The City will transport such materials as required from storage to the maintenance work area when requested by Contractor.

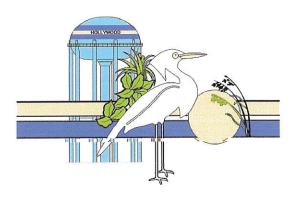


STATEMENT OF QUALIFICATIONS

IN RESPONSE TO

CITY OF HOLLYWOOD, FLORIDA CITY HALL/PROCUREMENT SERVICES DIVISION 2600 HOLLYWOOD BOULEVARD ROOM 303 HOLLYWOOD, FL 33020





CITY PROJECT NO. 16-9415

SOUTHERN REGIONAL WASTEWATER TREATMENT PLANT CRYOGENIC PLANT TURNAROUND MAINTENANCE YEAR 2016

September 1, 2016



HOLLYWOOD, FLORIDA ON-SITE CRYOGENIC OXYGEN FACILITY SERVICES

STATEMENT OF QUALIFICATIONS PROFESSIONAL SERVICES

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STATEMENT OF QUALIFICATIONS PROFESSIONAL SERVICES

IN RESPONSE TO CITY OF HOLLYWOOD, FLORIDA CITY PROJECT NO. 16-9415

SOUTHERN REGIONAL WASTEWATER TREATMENT PLANT CRYOGENIC PLANT TURNAROUND MAINTENANCE YEAR 2016

EXECUTIVE SUMMARY

This proposal is offered in response to a Request for Contractor Experience issued by City Hall/Procurement Services Division on behalf of the City of Hollywood Southern Regional Wastewater Treatment Plant for the Five Year Maintenance Turnaround Services for Cryogenic Oxygen Plant. The description of work will consist of items as outlined in section 11001 including, but not limited to:

- Standard maintenance tasks associated with a five-year turnaround for a Union Carbide cryogenic oxygen plant, including replacement of the cold end check valves
- Replacement and testing of the nitrogen superheater in the cold box
- Leak checking, repairs as needed, and testing of the main condenser in the cold box
- Re-establishing vacuums in the two LOX storage tanks
- Allowance for LOX supply during the turnaround
- Cryogenic plant shutdown and startup services prior to and following completion of the outlined scope

Solutionwerks is proposing to serve as the general contractor for this contract and will provide the required services as requested. The work will be self-performed by Solutionwerks' engineers with specific experience in oxygen generation for municipal wastewater treatment and a combination of Solutionwerks' field services personnel, as well as pre-qualified, approved subcontract personnel.

Telephone

1-610-928-7188 1-610-928-7189





As a supplier of industrial gases equipment and technical services, Solutionwerks routinely provides maintenance turnarounds and upgrades to clients in the municipal and industrial sectors. Our company is very familiar with the types of services contemplated. Solutionwerks provides similar services to many other municipal wastewater clients for their high purity oxygen generation and aeration systems and is knowledgeable about the specific requirements for this site.

Qualified technical personnel are available to execute both phases of this project and are prepared to begin work within 30 days following authorization to proceed. A scope of work and schedule for completion will be mutually agreed upon by City of Hollywood and Solutionwerks, Inc.

Solutionwerks is one of the leading providers of technical services and equipment for oxygen generation systems to municipalities throughout the United States and currently services clients such as the cities of Fort Lauderdale and Tampa in Florida; Boston, Massachusetts; Philadelphia, Pennsylvania; Springfield, Missouri; Louisville, Kentucky; along with many more. Solutionwerks is also prepared, if requested, to extend its evaluation into the high purity aeration system to ensure that the complete process is optimized from the oxygen generation system thru the point of use.

The sections following detail our experience and other qualifications for the proposed work. Solutionwerks welcomes the opportunity to answer any questions that may arise during the evaluation and/or meet with the City of Hollywood as needed.

Telephone

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COMPANY BACKGROUND

Solutionwerks is an engineering, procurement, and construction services company focused on meeting the growing needs of industrial and municipal clients who own and operate industrial gas production facilities. The company has grown to become one of the leading suppliers of technical services and equipment related to the production of oxygen for municipal wastewater treatment facilities in the U.S. Solutionwerks incorporated in Allentown, Pennsylvania in 2000, relocated to Cincinnati, Ohio in 2001 and returned to Allentown in 2013.

As illustrations of the diverse nature of Solutionwerks' client portfolio, Solutionwerks serves municipal wastewater treatment plants wherever high purity oxygen is used such as Fort Lauderdale, Florida and the Massachusetts Water Resources Authority (MWRA) waste treatment plant on Deer Island outside Boston; the Tampa Electric Company (TECO) biofuels gasification power plant in Polk County, Florida; Airgas and Linde, two of the largest industrial gas companies in the U.S.; and Hudson Bay Mining and Smelting Company, a non-ferrous metals smelter in Flin Flon, Manitoba, Canada.

The company founder, president and general manager is Dennis Derr. Dennis, prior to starting Solutionwerks, was employed 28 years in various technical and commercial roles by Air Products

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U.S.A.





and Chemicals, Inc., a major industrial gas company and supplier of oxygen plants worldwide. Dennis' position just prior to his early retirement from Air Products in 2000 was General Manager of the Process Plants and Services group.

Solutionwerks is incorporated in Pennsylvania and is registered with the United States Small Business Administration as a small business.

SERVICE CAPABILITIES

Solutionwerks provides engineering, procurement, and construction (EPC) services for the maintenance, upgrade, and operation of industrial gas plants. EPC services are available throughout the U.S. and the company's engineering and procurement services have been utilized by clients in Europe, Asia, and Latin America. Equipment and technical services are available for both cryogenic and non-cryogenic air separation plants, i.e. plants that produce one or more of the atmospheric gases, i.e. oxygen, nitrogen, and argon. Solutionwerks also supports natural gas processing for the production of hydrogen and liquid fuels. A summary of product offerings follows:

- Replacement equipment (rotating machinery, heat exchangers, pressure vessels, etc.)
- Plant refurbishment
- Control system upgrades
- Major maintenance turnarounds
- Preventative maintenance
- Back-up LOX/LIN supply
- Spare and replacement parts provisioning
- Performance testing
- Life cycle assessments
- Operations and maintenance training
- Plant relocation

In the field of wastewater treatment, Solutionwerks is also able to provide equipment and technical support for the oxygen dissolution systems, typically trade named either OASES (Air Products) or UNOX (Union Carbide). The company provides maintenance and technical support for those systems as a complement to the oxygen generation systems to ensure the efficient utilization of oxygen in the activated sludge treatment system.



KEY PERSONNEL

Dennis Derr -- General Manager

Dennis is the founder, president and general manager of Solutionwerks, Inc. Prior to the founding of Solutionwerks, Dennis was General Manager of the Process Plants and Services group for Air Products and Chemicals, Inc. in Allentown, Pennsylvania where he was responsible for the global supply of air separation plants and aftermarket services.

Dennis' professional experience in the industrial gases industry spans a total of 40+ years and encompasses virtually all aspects of plant, equipment, and technical services supply, including project management, product development, equipment design, procurement, sales, marketing, and business development. Under his guidance, Solutionwerks has successfully undertaken many upgrade and refurbishment projects for air separation plants throughout the industry and is a leading supplier of equipment and technical services to municipal wastewater treatment plants throughout the U.S.

Dennis holds a B.S. in Mechanical Engineering from Penn State University and an M.S. in Industrial Engineering from Lehigh University.

Larry Shakley - Vice President, Engineering

Larry joined Solutionwerks in 2007 and serves as the project manager for major capital projects. Larry is well versed in the technologies and equipment used in cryogenic air separation and high purity oxygen wastewater treatment.

Prior to joining Solutionwerks, Larry worked for several other technology-driven companies, including Atlantic Richfield (ARCO), USI Chemicals, Arabian American Oil Company (ARAMCO) and the Pennsylvania Power and Light Company (PP&L) in various senior engineering and plant maintenance positions. In his most recent roles prior to joining Solutionwerks, Larry was president of ARCO Pipeline Company and then worked as an independent industry consultant

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Larry holds a B.S. in Mechanical Engineering from Clarkson University and has completed professional development programs at Duke University, Penn State, and the Levinson Institute.

Roger Hill - Senior Field Services Technician

Roger has 30 years' experience in the field of wastewater treatment and oxygen generation where he has been responsible for plant operations, start-up, maintenance, and troubleshooting as well as operator training. Roger is a specialist in instrumentation and controls and has executed PLC control system upgrades for PSA oxygen generators, UNOX waste treatment systems, and cryogenic air separation facilities. He has also supervised the rehabilitation of PSA oxygen generation systems and various bio-reactor upgrade projects

Clarence Meridith Field Services Technician

Clarence joined Solutionwerks in 2004 and has more than 35 years' experience in the field of wastewater treatment and oxygen generation where he has been responsible for plant operations, start-up, maintenance, and troubleshooting as well as operator training, both in the field and in classroom settings. Prior to joining Solutionwerks, Clarence was the Process Supervisor and Instructor overseeing the cryogenic oxygen generation and high purity oxygen dissolution system at the Metropolitan Sewer District in Louisville, Kentucky. Clarence was responsible for creating and executing training programs for plants and equipment at plant sites and for wastewater certification throughout the state of Kentucky.

Martin Dawson – Project Engineer

Martin joined Solutionwerks in 2016 after graduating with a B.S. in Mechanical Engineering from Penn State. During his college career, he was a Member of National Society of Leadership and Success. Martin received a letter of recognition for outstanding academic achievement from a local Congressman. Martin holds machining and welding certifications from The Pennsylvania State University Learning Factory and is certified in laboratory safety including hazardous waste management. As a member of





Lunar Lion SpaceProgram, Structures team, he machined many mission critical components for the Lunar Lions and for fun was on the PSU Lehigh Valley Golf Team.

Martin brings a blend of engineering, management, technical and entrepreneurial experience. He is responsible for assisting with cost estimates, scope development and project execution and also assists with maintenance turnarounds, instrument calibrations and field services.

Barbara Breisch – Business Development Manager

Barbara joined Solutionwerks in 2013 as Business Development Manager and is responsible for assisting with the development of cost estimates and proposals during the design and work scope development phases and assists with project execution, procurement and field services.

Prior to joining Solutionwerks, Barbara held positions in marketing, information technologies, contract administration and accounting at Wacker Chemie and Air Products and Chemicals. Barbara was transferred to Wacker Chemie as part of a business unit sale from Air Products to Wacker in 2008 and prior to that had worked 20 years at Air Products in the Process Gases, Global Information Technology, and Supply Management divisions.

Barbara holds B.S. degrees in Marketing and Computer Science from Cedar Crest College and an A.S. degree in Letters, Arts & Science from Penn State.

Sherri Albro - Financial Manager

Sherri also joined the Solutionwerks team in 2013 and is responsible for financial management of the company as well as project accounting, procurement services, and administrative support. Sherri executes all receivables and payables for the company.

Prior to joining Solutionwerks, Sherri was a financial professional with AXA Advisors/Karr Barth Associates and provided accounting services to several non-profit agencies and small businesses.

Sherri holds a B.S. degree in Business Administration from the University of Alabama.

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In addition to the above key personnel, other engineers and technical specialists are available to provide assistance on an as-needed basis. These specialists may be drawn from either Solutionwerks or subcontract engineering firms.

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REFERENCES

The following table summarizes some of Solutionwerks' experience providing maintenance, rehabilitation and upgrade services to other clients:

Client	Plant Type &	Work	D. f	0-4-41-6
Name	Completion	Description	Reference	Contact Information
Philadelphia Water Department 8200 Enterprise Avenue, Philadelphia, PA 19153	2 Union Carbide 100 t/d Cryo plants Annual turnarounds, maintenance & repairs – 5 yr. turnaround November 2015	Compressor overhaul, cold box refurbishment, equipment rebuilds & replacement, 1,5 & 10 yr. maintenance turnarounds, instrument calibration, performance testing, repairs and upgrades, operator training, et al	Matt Jackson	Telephone: (215) 685-4049 Email: Matt.Jackson@phila.gov
Massachusetts Water Resources Authority 190 Tafts Avenue Winthrop, MA 02152	2 Linde 150 t/d Cryo plants Semi-annual turnarounds, monthly maintenance & repairs – April 2016	Main air compressor (MAC) upgrades, vibration monitor system replacement, oxygen compressor additions, instrument calibrations, maintenance turnarounds, equipment replacements	John Baranowsky, P.E.	Telephone: (617) 660-7872 Email: John.Baranowsky@mwra.co m
Springfield Wastewater Treatment Plant 3301 SFF Highway, Springfield, MO 65807	1 Union Carbide 50 t/d Cryo plant Annual turnarounds, maintenance & repairs – October 2015	Control system upgrades (PLC), main air compressor (MAC) upgrades, oxygen compressor additions, maintenance turnarounds, operator training	Mark Ryan	Telephone: (417) 891-1600 Email: MRyan@SpringfieldMo.gov
Cedar Rapids Water Pollution Control Division Cedar Rapids, IA	1 Union Carbide 80 t/d Cryo plant May 2015	Oxygen Generator System Upgrade, Ambient Vaporizer and Control System Replacement, Cooling Tower Replacement, various System Upgrades, operator training	HDR Engineering / Mike Butterfield, P.E.	Telephone: (319) 373-2536 Ext 3 Email: Michael.Butterfield@hdrinc.com

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Plant Type & Client Work Reference **Contact Information** Completion Name Description Operations Air Products Cold box Diana Telephone: Management 60 t/d Cryo refurbishment, (610) 395-9782 x216 Heimbach International/Lehi plant equipment gh WWTP replacements, Annual upgrades, cryogenic Diana.Heimbach@ch2m.co 7676 Industrial turnarounds. insulation, instrument m Blvd. maintenance & calibrations. Allentown, PA repairs - 5 yr. maintenance & 18106 turnaround emergency repairs December and turnarounds, 2015 operator training Emergency turnaround July 2016 City of Lancaster 1 Union Equipment Ed Telephone: Carbide 40 t/d replacement, Mastromateo (717) 293-5537 1220 New Cryo plant upgrades, cryogenic Danville Pike insulation, instrument Email: Lancaster, PA calibrations, valve Annual EMastro@cityoflancasterpa. 17603 turnaround repairs, maintenance com October 2015 & repairs, operator training City of Baltimore 2 Union Cold box Larry Fischer Telephone: Patapsco Carbide 80 t/d refurbishment, (410) 396-2839 Wastewater Cryo plants equipment Treatment Plant replacements, Email: Annual upgrades, cryogenic larry.fischer@baltimorecity.g 3501 Asiatic Ave turnarounds, insulation, instrument OV Baltimore, MD monthly calibrations. maintenance & 21226 maintenance & repairs -May emergency repairs 2016 and turnarounds, operator training City of Tampa 2 Air Products Entire plant John Hastings Telephone: Howard F. Cryo plants 60 refurbishment -(813) 299-9049 Curren Advanced t/d & 80 t/d Control system Wastewater plants upgrades (PLC), main Email: Treatment Plant air compressor (MAC) John.Hastings@tampagov.n full overhaul Installing Anticipated 2545 Guy N completion and Intercooler and Verger Blvd, start-up Aftercooler drain Tampa, FL planned for valves and piping 33605 August/Septe instrumentation, mber 2016 vaporizer replacement and maintenance turnaround, operator training

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INSURANCE

Solutionwerks maintains the following insurance coverages and will provide a Certificate of Liability naming the Cedar Rapids Water Pollution Control Facility as an additional insured:

Workers Compensation	Statutory Limit
Employer's Liability	Statutory Limit
General Liability	\$1,000,000 Each Occurrence \$2,000,000 General Aggregate
Automobile Liability	\$1,000,000 combined single limit
Professional Liability	\$1,000,000 combined single limit \$2,000,000 General Aggregate
Excess Liability	\$5,000,000 Each Occurrence \$5,000,000 General Aggregate

A Certificate of Liability Insurance is below naming City of Hollywood as an additional insured.

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Industrial Gases Equipment and Services

ACORD	CERTI	FICATE OF LIA	BILIT	Y INS	URANC	_	ATE (MW/DD/YYYY)
THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICA				UPON THE CERTIFICATE			
CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.							
IMPORTANT: If the certificate h	older is an Al	DITIONAL INSURED, the	policy(ies	s) must be	e endorsed.	If SUBROGATION IS WAIV	/ED, subject to
the terms and conditions of the			endorseme	ent. A sta	tement on th	is certificate does not con	fer rights to the
certificate holder in lieu of such	endorsement(s).	CONTACT	** **			
R.J. Bailey Associates,			NAME: PHONE	Karen S	966-4598	FAY	
315 E Main Street	Liic		(AM: No E		insurebai	(A/C, No): (61	0) 966-6238
JIJ E MAIN SCIENCE			ADDRESS:				
Macungie PA	18062					alty Insurance Co	NAIC #
INSURED	20002					nsurance Company	25976
Solutionwerks, Inc				StarNe		isurance company	40045
22 South 2nd Street			INSURER C				10010
Suite No. 3			INSURER E				
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POLICY X PRO-						PRODUCTS - COMP/OP AGG \$	2,000,000
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Hollywood, FL 33020							
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							4.00

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> Page 14 of 20 Visit us at www.solutionwerks.com

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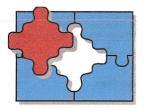
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SAFETY

The safety of all individuals working on a Solutionwerks project site is of paramount importance, whether the individuals are Solutionwerks', client, or contract personnel. Since its founding in 2000, Solutionwerks has logged more than 50,000 man-hours of field work without a lost time accident, including all site personnel. Solutionwerks' site supervisors and employees are trained in the hazards associated with a work site under construction and, in particular, the unique hazards associated with industrial gases. An excerpt from Solutionwerks' Safety Manual is included.



SOLUTIONWERKS, INC.

SAFETY MANUAL **OXYGEN GENERATION FACILITY MAINTENANCE SERVICES**

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SAFETY MANUAL

SECTION I

OXYGEN GENERATION FACILITY MAINTENANCE SERVICES

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SOLUTIONWERKS INC. City of Hollywood, FL Southern Regional Wastewater Treatment Plant Documentation City Project No. 16-9415

In reference to section 11001, section 2.2.d.3 of Five Year Maintenance Turnaround Services for Cryogenic Oxygen Plant Contract Documents and Specifications. As part of its offer, the Bidder shall provide to the City with the names and addresses of all subcontractors, statements of qualifications pertaining to the subcontractors and a description of their respective roles in the project.

A&B Group, Inc.

1401 E Napoleon Street Sulphur, LA 70663-3525 337-528-6880 Burton (Buddy) E. Baty, President/Owner

As a subcontractor to Solutionwerks, Inc., A&B Group, Inc. will be responsible for removal and temporary storage of Perlite from Cold Box and providing a confined space entry/rescue team.

A&B Group's Industrial Services division was founded to serve the Cryogenic Air Separation Industry; the Cryogenic Perlite evacuation and installation experts. Sulphur, Louisiana office serves as the "Center of Excellence" and the hub for all perlite work. A&B Group is the only company we know of that performs evacuation of perlite and also owns its own portable furnace to expand perlite on site. All field personnel have extensive experience with the removal and re-installation of perlite. Removal and re-installation process revolves around safety and meeting any and all environmental concerns.

Hetsco, Inc.

1725 N Graham Road Franklin, IN 46131 765-341-0878 Scott Willard, Director of Operations

As a subcontractor to Solutionwerks, Inc., HETSCO, INC. will be responsible for preparation for removal of current superheater and installation of the new superheater, and providing temporary cold box lighting.

Hetsco stands for Heat Transfer Service Company. Their founding objective is the repair and modification of brazed aluminum plate fin heat exchangers which is a vital part of the cryogenic gas processes and gas processing industries. With over 30 years of experience in performing emergency in field repairs domestically and internationally.

E-mail





Industrial Gases Equipment and Services

Hetsco is the "Go To" company for all work related to brazed aluminum heat exchangers and related equipment, thus maintaining a "Critical Vendor" status with many customers. Hetsco has maintained an (R) stamp from the National Board of Boiler and Pressure Vessel Inspectors since 1983.

Flotech, Inc. 3485 Evergreen Ave. Jacksonville FL, 32206 904-358-1849

As a subcontractor to Solutionwerks, Inc., Flotech Inc. will be responsible for testing, recertifying and repair of Safety Relief Valves.

A combination of valve expertise, in-house foundry capabilities and complete tube services as a true full service center for customers' requirements. They have a reputation for high quality valve service; Flotech provides valve repair, tube repairs, safety valve certification, actuation, control valve repair and new valves including repair and remanufacture of control valves.

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info@solutionwerks.com





SOLUTIONWERKS INC. City of Hollywood, FL Southern Regional Wastewater Treatment Plant Documentation City Project No. 16-9415

In reference to section 11001, section 2.2.d.4 of Five Year Maintenance Turnaround Services for Cryogenic Oxygen Plant Contract Documents and Specifications. As part of its offer, the Bidder shall provide to the City with a statement as to whether the company has been terminated for any reason or has ever failed to complete a contract for oxygen plant maintenance services. If so, state the name of the Owner and a description of the circumstances.

Solutionwerks, Inc. does not have any instances of termination or has failed to complete a contract for oxygen plant maintenance services.

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. Oute reservant entre de la company





SOLUTIONWERKS INC. City of Hollywood, FL Southern Regional Wastewater Treatment Plant Documentation City Project No. 16-9415

In reference to section 11001, section 3.0 of Five Year Maintenance Turnaround Services for Cryogenic Oxygen Plant Contract Documents and Specifications. As part of its offer, the Bidder shall provide a complete description of its plan for supervision of the five-year turnaround services, coordination of activities by subcontractors, preparations for shut down and the anticipated completion schedule.

- **1.1** Pre-Shutdown Coordination initial onsite meeting with all parties involved to review and agree on scope, timing, details and safety procedures. Ensure all subcontractors, materials and equipment are available. Discuss potential issues and plan of action for any issues which might arise. Dennis Derr to be key contact onsite.
- **1.2** Plant Cold Thaw check ensure LOX back-up system, instrument air and thaw heater are in proper working order; review and follow written procedures ensuring everything is set in place prior to shutting down coldbox. Shut down coldbox drain liquids to LOX storage and follow appropriate/documented written instructions to complete the cold thaw and bring to ambient temperature.
- 1.3 1.6 Contractor, under Solutionwerks supervision will remove and store perlite; Confined Spaced Entry/SAFETY determine with City where the enclosed bags of perlite will be temporarily stored prior to removal. Remove perlite, as part of this process, and prior to entering the coldbox, a confined entry team will be onsite and in place; appropriate lock out-tag out requirements will be in place for the MAC, Make and Add lines and any other equipment deemed necessary to ensure safety standards required by OSHA, the City, contractor and subcontractors.

Wash down cold box and turbine areas – install temporary cold-box lighting which will be provided by contractor/sub-contractor for interior work as appropriate.

1.7 Inspect and clean surge tank – supervise City personnel when opening the man-way of the air surge tank, inspect de-mister pads and clean debris from the tank floor. Flush condensate drain pipe to ensure no blockage before re-installing a new gasket provided by the City and properly secure the cover. Inspect and clean surge tank drain pipes and condensate trap for proper drainage during normal operation.

E-mail



Industrial Gases Equipment and Services

- **1.8** Recertify Pressure Relief Valves Solutionwerks will remove all safety valves, give to subcontractor to test, recertify & tag or repair. All valves are to be maintained in an oxygen clean environment or cleaned appropriately prior to Solutionwerks re-installing back in place.
- **1.9** Rebuild Switch Valves Solutionwerks to rebuild four 12" Jamesbury Butterfly valves and actuators with parts & gaskets provide by the City. As part of the process, Solutionwerks will ensure oxygen cleaned, stroke and test valves prior to putting back in service.
- **1.10** Replace Cold End Check Valves Solutionwerks will remove current check valves, prepare and leak check four new check valves and gaskets supplied by the City and install in coldbox. Ensure oxygen cleaning maintained prior to installing in coldbox.
- **1.11** Replace Nitrogen Superheater Solutionwerks to supervise and assist contractor as required to replace the current superheater with the new, larger superheater. The aluminum process piping attached to the currently installed smaller superheater to be cut before superheater can be removed through an opening to be cut by Contractor in the outer wall of the cold box.

The new superheater will be inspected to verify the integrity of its nitrogen purge prior to cutting stub ends from its nozzles. If the superheater does not have at least 5 psig pressure on each of its passages prior to cutting, each passage must be pneumatically leak checked at a minimum pressure of 10 psig to verify its leak integrity. At pressure, all surfaces and joints of the superheater will be sprayed with a soap solution to inspect for leaks.

After preparation for installation, the superheater will be lifted, guided and lowered into position and then re-attached to its associated process piping. The superheater has been pre-cleaned for oxygen service and must be maintained in an oxygen-clean state during handling and installation. Any contamination of open nozzles, etc. must be re-cleaned as necessary prior to installation to ensure safe operation. Following re-attachment of the process piping, the superheater and its attached piping will be re-tested pneumatically and inspected with a soap solution to ensure zero leakage.

1.12 Leak Check Upper and Lower Columns and Heat Exchangers. After replacement of the nitrogen superheater and rebuilding the cold end check valves, a leak check of the upper and lower columns along with the various heat exchangers in the cold box is to be conducted by Contractor. The shelf and kettle transfer valves as well as the turbine block valves should be closed. All four switch valves along with the product oxygen and vent oxygen valves, the LOX Add and Make valves, and all upper column vents and drains are also to be closed.

With all valves closed and a main air compressor operating at 50 to 60 PSIG discharge pressure, the air switch valve bypass valves (A and B pass) are to be opened one at a time with a vent on the opposing passage open. With the upper (low pressure) column thus isolated, there should be little to no air vented from the low pressure passage during this procedure.

Repeat the above test procedure, substituting the oxygen vent for the A or B pass vent. There should be little or no air vented from the oxygen vent during this procedure.

Telephone Fax E-mail info

1-610-928-7188 1-610-928-7189 info@solutionwerks.com



Industrial Gases Equipment and Services

Under such test conditions, it is not unusual to find leaks past valve seats. It is, therefore, unlikely that a perfect test result, i.e. zero venting, will be achieved. If a substantial volume of air vents from the low pressure passage, the vent should be closed to measure the rate of pressure rise in the upper column. If the upper column pressure increases at a rate greater than 1 PSIG in five minutes, this will be considered a failed test and warrant further investigation. The location of such a leak could be at one or more of the process valves, an inter-passage leak in one of the heat exchangers (including the main condenser), and/or an internal leak between the upper and lower columns.

In the event of failure of the column/heat exchanger leak test, further investigation shall be carried out by Contractor to verify the source of the leak. The Contractor may use whatever means are needed, up to and including cutting and blanking process piping, to verify such source and to develop a plan of action for repair.

Contractor must be prepared to undertake any repair needed, including aluminum pressure vessel and/or heat exchanger cutting and welding, to stop the leaks such that the operation of the cryogenic process is unimpeded. Should vessel repairs be required, repairs shall be carried out in such a manner that the structural integrity of the vessel and/or support structures is not compromised during the repair process and that all work is completed safely. Contractor shall be responsible for any temporary lighting, ventilation, and/or other provisions as needed to ensure personnel safety throughout the repair process.

Upon completion of repairs, the column leak check procedure must be completed to verify success. Should any pressure vessel be breached during the repair process, Contractor shall obtain ASME "R" stamp approval from an authorized inspector and apply an "R" stamp on a stainless steel plate welded to the ASME plate on the exterior of the cold box.

The cost for any process leak investigation beyond the initial leak check and repairs as described above shall be considered outside the base scope of work and shall be authorized by the City via change order prior to the start of repairs.

- **1.13** Coldbox Maintenance Solutionwerks to provide and top off Silica gel and replace gaskets in the cold end and recirculating gel traps.
 - Inspect all valve boots in the main and turbine boxes. Replace as necessary.
 - Inspect operation of thermocouples, RTD's & Delta T measurement system.
 Repair/replace as needed.
 - Test & calibrate purge pressure gauges and verify all ports are free flowing.
 - Inspect coldbox casing for cracks or structure deficiencies repair as needed
- **1.14** Leak check Coldbox after all work complete and reinstalling the perlite, conduct a final leak check of everything in the coldbox with a soap and water solution to verify no leaks.... Reseal any leaks to ensure everting is tight and no leaks are found.
- **1.15** Stroke Valves Stroke all pneumatically actuated valves, including inlet guide vanes on the three main air compressors and expansion turbine, to verify fully closed and 100% open positions. If valves do not travel thru the full range of motion, adjust actuator and/or positioner as needed to achieve full range. Verify smooth operation thru the full range and that valves are



Industrial Gases Equipment and Services

firmly seated in the closed position. Inspect actuators for signs of water and/or oil contamination and/or abnormal wear due to the reliance on back-up instrument air since the last annual turnaround. If actuators are in need of repair, rebuild as necessary using parts to be provided by the City.

Verify that compressor inlet guide vanes remain approximately 10% open in the closed position to enable positive air flow during compressor start-up.

- **1.16** Instrumentation Calibration Solutionwerks to test and calibrate all transmitters and switches and loop check for proper operation. Repair as required. Any switches or transmitters not in working order will be replaced outside of this scope via change order issued by the City.
- 1.17 Main Air Compressor (MAC) Maintenance Solutionwerks will supervise City personnel
 - Replace inlet filter elements supplied by City
 - Clean compressor inner, after and oil coolers via chemical flushing
 - If oil has not been changed within last five years, drain and refill with new oil conforming to the manufacturer specifications.
 - Replace lube oil filters supplied by City
 - Check and repair any water leaks
- **1.18** Turbine Maintenance Solutionwerks will supervise City personnel
 - Check the pressure in the oil accumulator bladder and re-pressurize, with oil pump shut off, to 50 PSIG as necessary
 - If oil has not been changed within last five years, drain and refill with new oil conforming to the manufacturer specifications.
 - Replace lube oil filters supplied by City
 - Check the condition of oil transfer hoses and replace as needed with those supplied by City
 - Chemical flush to clean oil cooler
 - Check and repair any water leaks
- **1.19** Seal Cold Box and Re-install Perlite A final inspection of the cold box to ensure all temporary equipment and fixtures have been removed, all debris has been cleared, all temperature indicators are still in working order, and all openings have been properly sealed.

Re-install previously removed perlite and top off completely with additional new perlite supplied by the contractor such that it is filled to the fill port on the roof of the cold box.

1.18 LOX Back-up System Maintenance

- Contractor shall provide a suitable vacuum pump and restore the vacuum levels of both LOX storage tanks to 20 microns Hg or less during the maintenance turnaround.
- All valve and instrument maintenance as prescribed for the rest of the cryogenic plant is
 to be completed for the LOX back-up system as well prior to plant shutdown.
 Maintenance is to be coordinated with the City and completed in such manner that does
 not impair the delivery of back-up gaseous oxygen to the waste treatment process.



Industrial Gases Equipment and Services

1.19 Cooling Water System Maintenance

- The cooling tower sump is to be drained and pressure washed, along with the tower fill, by City maintenance personnel.
- Cooling tower fan gearbox oil to be checked and topped off by City maintenance personnel as needed with manufacturer recommended lubricant.
- Cooling water pump bearings are to be lubricated by City maintenance personnel with manufacturer recommended lubricant

1.20 Plant Restart

Upon completion of all required maintenance for the five-year turnaround specifications, Solutionwerks will restart the oxygen plant. A warm plant thaw, purge, and cool down will be completed. All prescribed guidelines by the original equipment manufacturer, Union Carbide Corporation, are to be followed throughout the start-up procedure.

1.21 Reporting

Solutionwerks will maintain a log of work completed and shall prepare and submit a summary report of work completed to the City within 30 days of completion of the turnaround maintenance services.

E-mail

info@solutionwerks.com

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SOLUTIONWERKS INC. City of Hollywood, FL Southern Regional Wastewater Treatment Plant Documentation City Project No. 16-9415

In reference to section 11001, section 4.0 of Five Year Maintenance Turnaround Services for Cryogenic Oxygen Plant Contract Documents and Specifications. As part of its offer, the Bidder shall provide a written Contingency Plan that addresses, at a minimum; abnormal weather conditions, changes in Contractor's personnel or inability to acquire appropriates that could interrupt the five-year turnaround services outlined.

Solutionwerks anticipates that there will be brief periods of inclement weather (rain and wind) but does not anticipate that such delays will have a material effect on completion of the work within the designated time. Should there be any extraordinary weather delays attributable to catastrophic weather events, e.g. hurricane, flooding, etc., the associated delay times and associated costs shall be additive to the proposed time for completion and lump sum cost.

Telephone Fax E-mail in

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SECTION 00100

INSTRUCTIONS TO BIDDERS

1. PREPARATION OF BIDS:

Bids must be submitted on the separate and enclosed **BIDDING PACKAGE** forms, which shall be completed **by typewriter** or legibly handwritten in ink. The Bid price of each item on the form must be stated in words and numerals; in case of a conflict, words will take precedence. Where unit prices and extended totals are required, unit prices take precedence. Likewise, discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

If the Bid is made by an individual, he must sign his name therein and state his address. If the Bid is made by a firm or partnership, its name and address must be stated, as well as the name and address of each member of the firm or partnership. Bids by corporations must be signed by an authorized corporate officer (accompanied by evidence of authority to sign) and the corporate seal must be affixed and attested by the Secretary or an Assistant Secretary of the corporation. The corporate address and state of incorporation shall be shown below the signature. When the state of incorporation is other than Florida, proof of registry with Florida must be attached.

2. RECEIPT AND OPENING OF BIDS:

The separate **BIDDING PACKAGE** consisting of the PROPOSAL, PROPOSAL BID FORM, APPROVED BID BOND, TRENCH SAFETY FORM, INFORMATION REQUIRED FROM BIDDERS AND LIST OF SUBCONTRACTORS AND/OR MATERIAL SUPPLIERS shall be completed, signed and sealed as required and must be delivered in a sealed, opaque envelope, addressed to the City Clerk of Hollywood, Florida, by the time called for in the Notice to Bidders and shall be properly identified on the face thereof.

Proposals will be publicly opened and immediately read aloud at the time and place designated in the Notice to Bidders. No proposal will be considered which is not based upon these Drawings and Specifications, or which contains any letter or written memorandum qualifying the same, or which is not properly made out and signed in writing by the Bidder.

3. PRE-BID CONFERENCE:

A Pre-bid Conference will be held at the City of Hollywood Southern Regional Wastewater Treatment Plant, 1621 N. 14th Avenue, Hollywood, Florida, 33020 on August 4, 2016 at 2:00 p.m. It is recommended that all Contractors planning to submit a bid attend the meeting.

4. CONTRACT DOCUMENTS:

The Contract Documents give the location and description of the work to be done under this Contract and estimated quantities of each item of work for which Bids are invited, the time in which the work must be completed, the amount of the Bid Guaranty, if any, and the date, time and place of the receipt and opening of the Bids.

5. EXAMINATION OF CONTRACT DOCUMENTS AND SITE:

The Bidder is required to carefully examine the site of the work and the Contract Documents for the work contemplated. It will be assumed that the Bidder has investigated and is fully informed as to the requirements of the Contract Documents, laws, ordinances, codes and any other factors which may affect the performance of the work. Failure to be so informed will not relieve a successful Bidder of his obligation to furnish all material, equipment and labor necessary to carry out the provision of the Contract Documents and to complete the contemplated work for the consideration set forth in his Bid.

6. DIMENSIONS, QUANTITIES AND SUBSURFACE INFORMATION:

Dimensions, quantities and subsurface information supplied by the City are in no way warranted to indicate true amounts or conditions. Bidders/Contractors shall neither plead misunderstanding or deception, nor make claims against the City if the actual amounts, conditions or dimensions do not conform to those stated. Any "Outside" reports made available by the Engineer are neither guaranteed as to accuracy or completeness, nor a part of the Contract Documents.

7. ADDENDA - CHANGES WHILE BIDDING:

During the Bidding period, Bidders may be furnished addenda or bulletins for additions or alterations to the Plans or Specifications which shall be included in the work covered by the Proposal.

Any prospective Bidder in doubt as to the meaning of any part of the Drawings, Specifications or other Contract Documents may submit a written request to the Engineer for an interpretation. The Bidder submitting the request will be responsible for its prompt delivery. Any interpretation of the documents will be made by an addendum and a copy of such addendum will be mailed or delivered to each prospective Bidder who has received a set of documents. The City will not be responsible for any other explanations or interpretations of the proposed documents.

8. BID GUARANTY:

A Bid Guaranty in the form of a Cashier's Check, Certified Check or Bid Bond executed by the Bidder and a qualified Surety in the amount of **10**% of the Bid is required for this project in accordance with the Notice to Bidders.

9. TRENCH SAFETY FORM:

The Trench Safety Form included in the Bid Documents must be completed and signed. Noncompliance with this requirement may invalidate the bid.

10. QUALIFICATIONS AND DISQUALIFICATIONS OF BIDDERS:

The Contract will be awarded only to a Bidder, who in the opinion of the Engineer, is fully qualified to undertake the work and is in compliance with the City's Local Preference Criteria (when applicable). The City reserves the right before awarding the Contract to require a Bidder to submit such evidence of his qualifications as it may deem necessary and may consider any available evidence of his financial status, technical qualifications and other qualifications and abilities. Any one of the following causes, among others, may be considered as sufficient justification to disqualify a Bidder and reject his Bid:

- A. Submission of more than one Bid for the same work by an individual, firm, partnership or corporation under the same or different names.
- B. Evidence of collusion.
- C. Previous participation in collusive Bidding on work for the City of Hollywood, Florida.
- D. Submission of an unbalanced Bid in which the prices Bid for some items are out of proportion to the prices Bid for other items.
- E. Lack of competency. The Engineer may declare any Bidder ineligible, at any time during the process or receiving Bids or awarding the Contract, if developments arise which, in his opinion, adversely affects the Bidder's responsibility. The Bidder will be given an opportunity, by the Engineer, to present additional evidence before final action is taken.
- F. Lack of responsibility as shown by past work judged by the Engineer from the standpoint of workmanship and progress.
- G. Non-compliance with the City's Local Preference (when applicable).
- H. Uncompleted work for which the Bidder is committed by Contract, which is in the judgment of the Engineer, might hinder or prevent the prompt completion of work under this Contract.
- Being in arrears on any existing Contracts with the City, or any taxes, licenses or other monies due the City; in litigation with the City or having defaulted on a previous contract with the City.

11. LIFE AND WITHDRAWAL OF BID:

All Bids shall remain open for 90 days after the day of the Bid opening, however, the Engineer may, at his sole discretion, release any Bid and return the Bid Guaranty prior to that date. Any Bid may be modified or withdrawn prior to the time scheduled for the opening of Bids.

12. REJECTION OF IRREGULAR BIDS:

Bids will be considered irregular and may be rejected if they show omissions, alterations of form, additions not called for, conditions, limitations, unauthorized alternate Bids or other irregularities of any kind.

13. BIDDING ERRORS:

If after the opening of bids, a Bidder claims an error and requests to be relieved of the Award, or the Engineer believes that an error may have been made then, the Bidder shall present his work sheets and supplier quotations to the Engineer for verification. This information shall be presented on the same day as the bid opening or if the opening is in the afternoon then on the following business day. When the Engineer has suspected an error and requires the documents, Bidder's failure to produce them within the time specified shall make the Bidder non-responsive and thereby eligible for disqualification. Award may then be made to the next lowest responsive, responsible Bidder, or the work may be readvertised or it may be performed by City forces, as the Commission desires.

14. AWARD OF CONTRACT:

The City Commission reserves the right to reject any or all Bids, or any part of any Bid, to waive any informality in any Bid, or to re-advertise for all or any part of the work contemplated. If Bids are found to be acceptable by the City Commission, written notice of award will be given to the lowest responsive, responsible Bidder.

15. EXECUTION OF CONTRACT:

The Bidder to whom the Contract is awarded shall, within ten days of the date of award, execute and deliver three (3) copies of the following to the Engineer.

- A. The Contract
- B. Performance and Payment Bond
- C. Evidence of required Insurance
- D. Proof of authority to execute the Contract
- E. Proof of authority to execute the Bond on behalf of the Awardee

F. List of Subcontractors, estimated Contract Value for each and proof that such subcontractors possess all required Federal, State, County and/or municipality licenses, including but not limited to certified of competency and occupational license.

The above documents must be furnished, executed and delivered before the Contract will be executed by the City. The Contract shall not be binding upon the City until it has been executed by the City and a copy of such fully executed Contract is delivered to the Contractor.

16. FAILURE TO EXECUTE CONTRACT, BID GUARANTY FORFEITED:

Should the Bidder to whom the Contract has been awarded refuse or fail to complete the requirements of Article 15 above within ten (10) days after Notice of Award, the additional time in days (including weekends) required to CORRECTLY complete the documents will be deducted, in equal amount, from the Contract Time, or the City may elect to revoke the Award. In the same manner as Article 13, the Bid Guaranty of any Bidder failing to execute the awarded Contract shall be retained by the City and the Contract awarded as the Commission desires.

17. GUARANTY OF FAITHFUL PERFORMANCE AND PAYMENT:

A Performance Bond and a Payment Bond each equal to 100 percent of the total Bid will be required of the Awardee. The Bond must be written through a company licensed to do business in the State of Florida and be rated at least "A", Class X, in the latest edition of "Best's Key Rating Guide", published by A.M. Best Company. As per Florida Statute Section 255.05, the Contractor shall be required to record the payment and performance bonds in the public records of Broward County.

18. INSURANCE:

Bidder must satisfy all insurance requirements as set forth in the Supplementary and General Conditions.

The insurance policy shall not contain any exceptions that would exclude coverage for risks that can be directly or reasonably related to the scope of goods or services in this bid/proposal. A violation of this requirement at any time during the term, or any extension thereof shall be grounds for the immediate termination of any contract entered in to pursuant to this bid/proposal. In order to show that this requirement has been met, along with an insurance declaration sheet demonstrating the existence of a valid policy of insurance meeting the requirements of this bid/proposal, the successful proposer must submit a signed statement from insurance agency of record that the full policy contains no such exception.

19. QUALIFICATIONS:

At the time of submission of the bid, Bidder must possess, and be able to provide City, any and all required Federal, State, County and/or municipal licenses, including but not limited to certificates of competency and occupational licenses. Moreover, upon receipt of the Award of the Contract, Bidder must provide proof of valid licensing for all subcontractors and/or material suppliers hired by the Contractor.

When the Bidder is a Joint Venture, in order to satisfy the construction licensing requirements one member of a Joint Venture must hold a valid state certificate as well as the appropriate county and city license. The Contractor shall be held responsible for assurance that all subcontractors and/or material suppliers hired by the Contractor have the appropriate state certificate and licenses.

20. PERMITS:

The Contractor and Subcontractors must obtain Building Permits required for all work covered under this Contract as well as any other permit required by any other regulatory agency. The Master Building Permit required by the City shall be obtained by the Contractor but paid for by the City. Any and all other permits required by the City, County, State of Florida, or any other regulatory agency shall be obtained and paid for by the Contractor.

The Contractor or Subcontractors shall also be responsible to call for all inspections as required in Section 105 (Inspections) of the latest edition of the Florida Building Code.

- END OF SECTION -

SECTION 00200



NOTICE TO ALL BIDDERS AND PROPOSERS

Cone of Silence

The City of Hollywood City Commission adopted Ordinance No. <u>O-2007-05</u>, which created Section 30.15(E) imposing a Cone of Silence for certain City purchases of goods and services.

The Cone of Silence refers to limits on communications held between vendors and vendor's representatives and City elected officials, management and staff during the period in which a Formal Solicitation is open.

The Ordinance does allow potential vendors or vendor's representatives to communicate with designated employees for the limited purpose of seeking clarification or additional information. The names and contact information of those employees that may be contacted for clarification or additional information are included in the solicitation.

The Cone of Silence does not prohibit a vendor or vendor's representative from communicating verbally, or in writing to the City Manager, the City Manager's designee, the City Attorney or the City Attorney's designee on those procurement items to be considered by the City Commission.

The Cone of Silence does not prohibit a vendor or vendor's representative from making public presentations at a duly noticed pre-bid conference or duly noticed evaluation committee meeting or from communicating with the City Commission during a duly noticed public meeting.

The Cone of Silence shall be imposed when a formal competitive solicitation has been issued and shall remain in effect until an award is made, a contract is approved, or the City Commission takes any other action which ends the solicitation.

To view the Cone of Silence, Ordinance No. O-2007-05, go to the City of Hollywood's Official website at http://www.hollywoodfl.org/ConeOfSilence

- END OF SECTION -

SECTION 00300

PROPOSAL

TO THE MAYOR AND COMMISSIONERS CITY OF HOLLYWOOD, FLORIDA

SUBMITTED 25 August 5016

Dear Mayor and Commissioners:

The undersigned, as BIDDER, hereby declares that the only person or persons interested in the Proposal as principal or principals is or are named herein and that no other person than herein mentioned has any interest in this Proposal or in the Contract to be entered into; that this Proposal is made without connection with any other person, company or parties making a Bid or Proposal; and that it is in all respects fair and in good faith without collusion or fraud.

The BIDDER further declares that he has examined the site of the Work and informed himself fully in regard to all conditions pertaining to the place where the Work is to be done; that he has examined the Drawings and Specifications for the Work and contractual documents relative thereto, including the Notice to Bidders, Instructions to Bidders, Proposal Bid Form, Form of Bid Bond, Form of Contract and Form of Performance Bond, General, Supplementary and Technical Specifications, Addenda, Drawings, and Local Preference, Exhibit A, and has read all of the Provisions furnished prior to the opening of bids; and that he has satisfied himself relative to the work to be performed.

The undersigned BIDDER has not divulged to, discussed or compared his bid with other bidders and has not colluded with any other BIDDER of parties to this bid whatever.

If this Proposal is accepted, the undersigned BIDDER proposes and agrees to enter into and execute the Contract with the City of Hollywood, Florida, in the form of Contract specified; of which this Proposal, Instructions to Bidders, General Specifications. Supplementary Conditions and Drawings shall be made a part for the performance of Work described therein; to furnish the necessary bond equal to one hundred (100) percent of the total Contract base bid, the said bond being in the form of a Cash Bond or Surety Bond prepared on the applicable approved bond form furnished by the CITY; to furnish all necessary materials, equipment, machinery, tools, apparatus, transportation, supervision, labor and all means necessary to construct and complete the work specified in the Proposal and Contract and called for in the Drawings and in the manner specified; to commence Work on the effective date established in the "Notice to Proceed" from the ENGINEER; and to substantially complete all Contract Work within 30 days with final completion within 60 days, as stated in the "Notice to Proceed" or pay liquidated damages for each calendar day in excess thereof, or such actual and consequential damages as may result therefrom, and to abide by the Local Preference (when applicable).

The BIDDER acknowledges receipt of	f the following addenda:	
No. 1 Dated No. 2 Dated No. Dated No. Dated No. Dated	23 August 2016 24 August 2016	
And the undersigned agrees that in case of failure on his part to execute the said Contract and the Bond within ten (10) days after being presented with the prescribed Contract forms, the check or Bid Bond accompanying his bid, and the money payable thereon, shall be paid into the funds of the City of Hollywood, Florida, otherwise, the check or Bid Bond accompanying this Proposal shall be returned to the undersigned.		
Attached hereto is a certified check or	n the	
	Bank of	
or approved Bid Bond for the sum of Dollars (\$) according to the conditions under the Instructions to Bidders and provisions therein. NOTE: If a Bidder is a corporation, the legal name of the corporation shall be set forth below, together with signature(s) of the officer or officers authorized to sign Contracts on behalf of the corporation and corporate seal; if Bidder is a partnership, the true name of the firm shall be set forth below with the signature(s) of the partner or partners authorized to sign Contracts in behalf of the partnership; and if the Bidder is an individual, his signature shall be placed below; if a partnership, the names of the general partners.		
WHEN THE BIDDER IS AN INDIVIDU	JAL:	
	(Signature of Individual)	
	(Printed Name of Individual)	
	(Address)	

	(Name of Firm)	



CITY OF HOLLYWOOD DEPARTMENT OF PUBLIC UTILITIES ENGINEERING & CONSTRUCTION SERVICES DIVISION

1621 N. 14th Avenue Hollywood, FL 33019 Phone (954) 921-3930 Fax (954) 921-3258

ADDENDUM NUMBER

1

Date: August 23, 2016

FOR: CRYOGENIC PLANT TURNAROUND MAINTENANCE - Year 2016

FILE NUMBER: **16-9415**

ALL BIDDERS BE ADVISED OF THE FOLLOWING CHANGES TO THE ABOVE REFERENCED PROJECT AS LISTED BELOW:

This addendum is issued as part of the Bidding Documents for the above described project. The changes incorporated in this addendum shall be considered as a part of the documents and shall supersede, amend, add to, clarify, or subtract from those conditions shown in the original documents dated July 2016. The bidder shall coordinate all modifications herein with all trades and disciplines related to the work. The Bidder shall acknowledge receipt of this addendum on the Bid Form by addendum number and date. Failure to do so may subject Bidder to disqualification.

Item 1: General

Minutes for pre-bid meeting is enclosed following the addendum.

Item 2: Specification

2.1 Section 00030 – Notice to Bidders Page 1, First paragraph, line 4, please replace "2:30 a.m." with "2:30 p.m."

Item 3: Response to Questions

Question 1 from Ranch Cryogenics, Inc.:

We would love to do this cryo plant project and are very well suited for it, however we nor any of our necessary sub-contractors are licensed as GC's in the state of Florida. It would be impossible to obtain the license in the time permitted. I'm not sure if the contract could be changed due to circumstances, but I don't think any vendors capable of doing this job have a Florida GC license.

Response:

The City decided to waive General Contractor requirement for this project since it is maintenance work. However, the contractor shall pull a hot work permit from the Fire Department for the welding work for pure oxygen application.



CITY OF HOLLYWOOD DEPARTMENT OF PUBLIC UTILITIES ENGINEERING & CONSTRUCTION SERVICES DIVISION

1621 N. 14th Avenue Hollywood, FL 33019 Phone (954) 921-3930 Fax (954) 921-3258

ADDENDUM NUMBER 1

THIS ADDENDUM SHALL BE ATTACHED TO THE CONTRACT DOCUMENTS AND THE RECEIPT OF THE SAME SHALL BE NOTED IN THE PROPOSAL IN THE SPACE PROVIDED.

Jitendra Patel, P.E., Assistant Director Department of Public Utilities - ECSD



CITY OF HOLLYWOOD, FLORIDA

DEPARTMENT OF PUBLIC UTILITIES **ENGINEERING CONSTRUCTION SERVICES DIVISION** P. O. Box 229045 · Hollywood, FL 33022-9045 · Phone: 954-921-3930 · Fax: 954-921-3937

Cryogenic Plant Turnaround Maintenance - Year 2016 **Pre-Bid Meeting**

Meeting Minutes

Location: City of Hollywood Southern Regional Wastewater Treatment Plant (SRWWTP), ECSD Conference

Room

Date and Time: August 4, 2016 @ 2:00 PM

- Introduction: The City of Hollywood is the owner and operator of the facilities. Engineering 1. Construction Services Division designed the project and will provide field administration during construction. All attendees signed the attached sign-in sheet and introduced themselves during the meeting.
- 2. Scope of Project: The City intends to perform a five year maintenance turnaround for the cryogenic plant, including but not limited to removal and installation of perlite, cleaning surge tank, rebuilding switch valves, replacement of the nitrogen superheater and check valves, leak checking, miscellaneous maintenance required for the five year turnaround, restart of the cryogenic plant, and submittal of a summary report, etc.

3. **Bidding Document Description**

- Bidding Contract Document Package consists of:
 - Specifications

Bidders are required to confirm that they have a complete Contract Document package.

- Bidding Package includes:
 - Notice to Bidders
 - Instruction to Bidders
 - Cone of Silence
 - □ Proposal
 - Proposal Bid Form
 - Approved Bid Bond
 - □ Information Required From Bidders and a List of Subcontractors Bidders are required to submit one original bid package and two copies for filing purposes.

4. **General Comments**

The Bid submittal deadline is 2:00 p.m, August 25, 2016. On August 25, 2016 at 2:30 p.m. the bids will be opened and read publicly in the Department of Public Utilities, Engineering and Construction Services Division Conference Room at 1621 N. 14th Avenue, Building A, Hollywood, Florida.

5. **Key Concerns**

Project Working Hours: Project Working Hours: Standard working hours shall be 8 hours/day, Monday through Friday, between 7:00 AM and 5:00 PM. Working outside standard hours requires advance written approval from ECSD.

6. Completion Time

The Bid Documents require substantial completion (defined in the Supplementary General Conditions) as:

Major Milestone

Completion Time (days)*

Substantial Completion

30 days

Project Closeout

60 days (30 days after Substantial Completion)

The City will provide maximum 14 days liquid oxygen supply for the turnaround maintenance. If the contractor needs to shut down the system more than 14 days for their work, the contractor shall be responsible for the liquid oxygen supply cost after 14 days.

7. Contractor Questions / Comments

- Question/Comment 1: Can General Contractor license requirement be waived?
 Response: The City will discuss internally and respond.
- Question/Comment 2: Does the City provide spare parts for actuator on switch valves? Response: Yes, the City has spare parts for actuator on switch valves.
- Question/Comment 3: Does the contractor needs to provide gel after removal equipment in cold box?

Response: Yes, the contractor shall furnish and fill the gel full as required in the get trap.

8. Site Inspection

A tour of the construction site was provided after the meeting.

ENGINEERING & CONSTRUCTION SERVICES DIVISION CITY OF HOLLYWOOD

Cryogenic Plant Turnaround Maintenance - Year 2016

#

France of the server of P. O. france of the server of P. O. france of the server of th dennis, devr Ssolution werks, com E-MAIL Subject: PREBID 956-921 3930 512939-9380 954-982-9800 PHONE ORGANIZATION /COMPANY Intercounty Engineering, The COM COM -ECSD Project No.: 9415 Jolstinn werks Vennis Verr Mile Suscent STSUS FAMULT 8/4/2016 Date:



CITY OF HOLLYWOOD DEPARTMENT OF PUBLIC UTILITIES ENGINEERING & CONSTRUCTION SERVICES DIVISION

1621 N. 14th Avenue Hollywood, FL 33019 Phone (954) 921-3930 Fax (954) 921-3258

ADDENDUM NUMBER

Date: August 24, 2016

FOR: CRYOGENIC PLANT TURNAROUND MAINTENANCE - Year 2016

2

FILE NUMBER: 16-9415

ALL BIDDERS BE ADVISED OF THE FOLLOWING CHANGES TO THE ABOVE REFERENCED PROJECT AS LISTED BELOW:

This addendum is issued as part of the Bidding Documents for the above described project. The changes incorporated in this addendum shall be considered as a part of the documents and shall supersede, amend, add to, clarify, or subtract from those conditions shown in the original documents dated July 2016. The bidder shall coordinate all modifications herein with all trades and disciplines related to the work. The Bidder shall acknowledge receipt of this addendum on the Bid Form by addendum number and date. Failure to do so may subject Bidder to disqualification.

Item 1: General

Via this addendum, the bid submittal date/time is extended from 2:00 PM on August 25, 2016 to 2:00 PM on September 1, 2016. Bids shall be submitted to the City Clerk's Office (City Hall, 2600 Hollywood Blvd., Room 221) of the City of Hollywood. On September 1, 2016 at 2:30 PM. the bids will be opened and read publicly in the Department of Public Utilities, Engineering and Construction Services Division Conference Room.

THIS ADDENDUM SHALL BE ATTACHED TO THE CONTRACT DOCUMENTS AND THE RECEIPT OF THE SAME SHALL BE NOTED IN THE PROPOSAL IN THE SPACE PROVIDED.

Jitendra Patel, Þ.E., Assistant Director Department of Public Utilities - ECSD

	(Address)
	(SEAI
**************************************	**************************************
	(Name of Firm) A Partnership
	(Address)
Name and Address of all Partners:	By:(SEAL) (Partner)

	(Correct Name of Corporation
	By:(SEAL) (Address)
	(Official Title)
	As Joint Venture (Corporate Seal)
Organized under the laws of the State of by the law to make this bid and perform all vequired under the Contract Documents.	
**************************************	(Correct Name of Corporation

By: <u>Jennis</u> L Der (SEAL)
President
(Official Title)
Emmaus PA 18049
(Address of Corporation)
Organized under the laws of the State of, and authorized by the law to make this bid and perform all Work and furnish materials and equipment required under the Contract Documents.
CERTIFIED COPY OF RESOLUTION OF BOARD OF DIRECTORS
Soltionwerks, Inc. (Name of Corporation)
RESOLVED that Dewns L. Devr
(Person Authorized to Sign)
President of Solutionwerks, Inc.
(Title) (Name of Corporation)
be authorized to sign and submit the Bid or Proposal of this corporation for the following project:
CITY OF HOLLYWOOD Cryogenic Plant Turnaround Maintenance – Year 2016
PROJECT NO. 16-9415
The foregoing is a true and correct copy of the Resolution adopted by
Sol Tronwerks, Tuc at a meeting of its Board of
(Name of Corporation)
Directors held on the day of, 2016.
By: Dennis L. Perr De 1 De
Title: Tresident
(SEAL)

The above Resolution MUST BE COMPLETED if the Bidder is a Corporation.

- END OF SECTION -

SECTION 00301

CITY OF HOLLYWOOD **DEPARTMENT OF PUBLIC UTILITIES ENGINEERING AND CONSTRUCTION SERVICES DIVISION**

PROPOSAL BASE BID FORM

Project No.: Project Name:

16-9415

Cryogenic Plant Turnaround Maintenance - Year 2016

BASE BID

Item	Estimated		Unit	Extension or Total
No.	Quantity	Description	Price	
1	Lump Sum	Perform all work associated with the		
		Cryogenic Plant Turnaround		
		Maintenance – Year 2016 in accordance with the Contract		
		Documents for the lump sum price of:		
		Three hundred forty two thousan	d	
		eight hundred Dollars and		
		NI.		a 242 000 00
		NOCents		\$ <u>342,800.00</u>
2	Allerianes	Dedicated and allowers for the		
2	Allowance	Dedicated cost allowance for work as directed and upon authorization by the		
		City due to undefined conditions of:		
		Ten thousand Dollars and		
		No Cents	-	\$ 10,000.00
		<u></u> OSINO		Ψ_10,000.00
3	\$10	Consideration for Indemnification for		
		the lump sum price of:		
		TenDollars and		
		No Cents	19 <u>11-1</u> 1	\$ 10.00
				:
	TOTAL BID F	FOR PROPOSAL ITEMS 1 THROUGH 3		
	Written:			
	Three hun	dred fifty two thousand		
	eight hund	lred tenDollars and		
	No	Cents	. 35	52,810.00
	7 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Cents	\$35	72,010.00

NOTES:

- 1. SUBSTANTIAL COMPLETION TIME AND PROJECT CLOSEOUT TIME FOR THE WORK SHALL BE AS DEFINED IN THE PROJECT SCHEDULE IN THE SUPPLEMENTARY GENERAL CONDITIONS (SGC'S).
- 2. THE CITY OF HOLLYWOOD REQUIRES THE CONTRACTOR TO PROVIDE THE UNIT PRICE/TOTAL IN TEXT AS WELL AS NUMERICAL FORMAT FOR EACH LINE ITEM LISTED IN THE PROPOSAL BID FORMS. FAILURE TO PROVIDE UNIT PRICE/TOTAL FOR EACH LINE ITEM IN TEXT AS WELL AS NUMERICAL FORMAT MAY RENDER THE ENTIRE BID PACKAGE NON-RESPONSIVE.
- 3. THE CITY OF HOLLYWOOD WILL EVALUATE THE BID PROPOSALS AND DETERMINE THE LOWEST, RESPONSIVE, RESPONSIBLE BIDDER FOR THE TOTAL BASE BID (ITEMS 1 THROUGH 3). IT IS THE CITY OF HOLLYWOOD'S INTENT TO AWARD THE PROJECT BASED UPON THE TOTAL BASE BID.

- END OF SECTION -

NOTES:

- 1. SUBSTANTIAL COMPLETION TIME AND PROJECT CLOSEOUT TIME FOR THE WORK SHALL BE AS DEFINED IN THE PROJECT SCHEDULE IN THE SUPPLEMENTARY GENERAL CONDITIONS (SGC'S).
- 2. THE CITY OF HOLLYWOOD REQUIRES THE CONTRACTOR TO PROVIDE THE UNIT PRICE/TOTAL IN TEXT AS WELL AS NUMERICAL FORMAT FOR EACH LINE ITEM LISTED IN THE PROPOSAL BID FORMS. FAILURE TO PROVIDE UNIT PRICE/TOTAL FOR EACH LINE ITEM IN TEXT AS WELL AS NUMERICAL FORMAT MAY RENDER THE ENTIRE BID PACKAGE NON-RESPONSIVE.
- 3. THE CITY OF HOLLYWOOD WILL EVALUATE THE BID PROPOSALS AND DETERMINE THE LOWEST, RESPONSIVE, RESPONSIBLE BIDDER FOR THE TOTAL BASE BID (ITEMS 1 THROUGH 3). IT IS THE CITY OF HOLLYWOOD'S INTENT TO AWARD THE PROJECT BASED UPON THE TOTAL BASE BID.

- END OF SECTION -

SECTION 00410

APPROVED BID BOND

(Construction)

STATE OF FLORIDA

KNOW ALL MEN BY THESE PRESENTS:			
That we Solutionwerks, Inc,		as Principal, and	The Guarantee Company of North America USA,
as Surety, are held and firmly bound unto t	the City of H	ollywood in the s	um of
Ten Percent of Amount Bid	_Dollars (\$_	10%) lawful
money of the United States, amounting to	10% of the	total Bid Price, fo	r the payment of
said sum, we bind ourselves, our heirs,	executors,	administrators,	and successors,
jointly and severally, firmly by these preser	nts.		
THE CONDITION OF THIS OBLIGATIO	N IS SUCH	l, that whereas t	he principal has
submitted the accompanying bid, dated	August 25		20 <u>16</u> for

<u>Cryogenic Plant Turnaround Maintenance – Year 2016</u> Project No. 16-9415

NOW, THEREFORE, if the principal shall not withdraw said bid within 90 days after date of the same and shall within ten days after the prescribed forms are presented to him for signature, enter into a written contract with the CITY, in accordance with the bid as accepted, and give bond with good and sufficient surety or sureties, and provide the necessary Insurance Certificates as may be required for the faithful performance and proper fulfillment of such Contract, then this obligation shall be null and void.

Solutionwerks, Inc., 22 Second. 2nd Street, Suite No. 3,

In the event of the withdrawal of said bid within the specified period, or the failure to enter into such contract and give such bond and insurance within the specified time, the principal and the surety shall pay to the City of Hollywood the difference between the amount specified in said bid and such larger amount for which the City of Hollywood may in good faith contract with another party to perform the work and/or supply the materials covered by said bid.

IN VIIINESS VANEREOF, the above	ve bound parties have executed this statement under their
several seals this 25th	
day of August , 2	20 <u>16</u> , the name and corporate seal of each corporate party
being hereto affixed and these prese	ents duly signed by its undersigned representative, pursuant
to authority of its governing body.	
WHEN THE PRINCIPAL IS AN IND	IVIDUAL:
Signed, sealed and delivered in the	presence of:
Witness	Signature of Individual
	_
Address	
	Printed Name of Individual
Witness	-
VVILLIE22	
Address	

WHEN THE PRINCIPAL IS A CORPORATION	ON:
Attest:	Solutionwerks, Inc.
Secretary	Name of Corporation
	22 South 2nd Street, Suite No. 3, Emmaus, PA 18049-3984
	Business Address
	Ву:
	(Affix Corporate Seal)
	Dennis L. Perr
	Printed Name
	President
	Official Title
CERTIFICATE AS TO	CORPORATE PRINCIPAL
I, <u>Dennis L. Dew</u> Corporation named as Principal in the attached	, certify that I am the secretary of the
	ehalf of the Principal, was then
of said Corporation: that I kn	now his signature, and his signature thereto is
genuine and that said bond was duly signed	I, sealed and attested for and on behalf of said
Corporation by authority of its governing body.	and attested for and on benait of said
	(CEAL)

Secretary

TO BE EXECUTED BY CORPORATE SURETY: Attest:

Randall Musselman	The Guarantee Company of North America USA
Secretary	Corporate Surety
	One Towne Square, Suite 1470, Southfield, MI 48076
	Business Address
	BY: Mark Store Long
	(Affix Corporate Seal)
	Mark Steven Drengler
	Attorney-in-Fact
	Surety Bonds & Insurance Agency, Inc.
	Name of Local Agency
	7540 Sawmill Parkway, Suite D, Powell, Ohio 43065 Business Address
	busiless Address
STATE OF OHIO	
Before me, a Notary Public, duly commission	ned, qualified and acting, personally appeared,
Mark Steven Drengler to me well to	personally appeared,
to the well k	nown, who being by me first duly sworn upon oath
says that he is the attorney-in-fact for the The	ne Guarantee Company of North America USA and
that the has been authorized by The Guarantee C	ompany of North America USA to execute the forgoing bond
on behalf of the CONTRACTOR named then	ein in favor of the City of Halland J. E
Subscribed and sworn to before me this ass	on in lavor of the City of Hollywood, Florida.
Subscribed and sworn to before me this 25t	h_day ofAugust, 20_16
	Juliani M. Dack
	Notary Public, State of Ohio
My Commission Expires: October 29, 2016	

- END OF SECTION -



The Guarantee Company of North America USA Southfield, Michigan

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS: That THE GUARANTEE COMPANY OF NORTH AMERICA USA, a corporation organized and existing under the laws of the State of Michigan, having its principal office in Southfield, Michigan, does hereby constitute and appoint

Mark S. Drengler, Julianne M. Drengler, Gayle McClellan Surety Bonds & Insurance Agency, Inc.

its true and lawful attorney(s)-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise.

The execution of such instrument(s) in pursuance of these presents, shall be as binding upon THE GUARANTEE COMPANY OF NORTH AMERICA USA as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at the principal office.

The Power of Attorney is executed and may be certified so, and may be revoked, pursuant to and by authority of Article IX, Section 9.03 of the By-Laws adopted by the Board of Directors of THE GUARANTEE COMPANY OF NORTH AMERICA USA at a meeting held on the 31st day of December, 2003. The President, or any Vice President, acting with any Secretary or Assistant Secretary, shall have power and authority:

 To appoint Attorney(s)-in-fact, and to authorize them to execute on behalf of the Company, and attach the Seal of the Company thereto, bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof; and

2. To revoke, at any time, any such Attorney-in-fact and revoke the authority given, except as provided below

3. In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner —

Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

Further, this Power of Attorney is signed and sealed by facsimile pursuant to resolution of the Board of Directors of the Company adopted at a meeting duly called and held on the 6th day of December 2011, of which the following is a true excerpt:

RESOLVED that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any Power of Attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, contracts of indemnity and other writings obligatory in the nature thereof, and such signature and seal when so used shall have the same force and effect as though manually affixed.



IN WITNESS WHEREOF, THE GUARANTEE COMPANY OF NORTH AMERICA USA has caused this instrument to be signed and its corporate seal to be affixed by its authorized officer, this 2nd day of October, 2015.

THE GUARANTEE COMPANY OF NORTH AMERICA USA

Stroky Chroched

STATE OF MICHIGAN County of Oakland

Stephen C. Ruschak, President & Chief Operating Officer

Randall Musselman, Secretary

andre pur

On this 2nd day of October, 2015 before me came the individuals who executed the preceding instrument, to me personally known, and being by me duly sworn, said that each is the herein described and authorized officer of The Guarantee Company of North America USA; that the seal affixed to said instrument is the Corporate Seal of said Company; that the Corporate Seal and each signature were duly affixed by order of the Board of Directors of

NOTANI POLINI Cynthia A. Takai Notary Public, State of Michigan County of Oakland My Commission Expires February 27, 2018 Acting in Oakland County

IN WITNESS WHEREOF, I have hereunto set my hand at The Guarantee Company of North America USA offices the day and year above written.

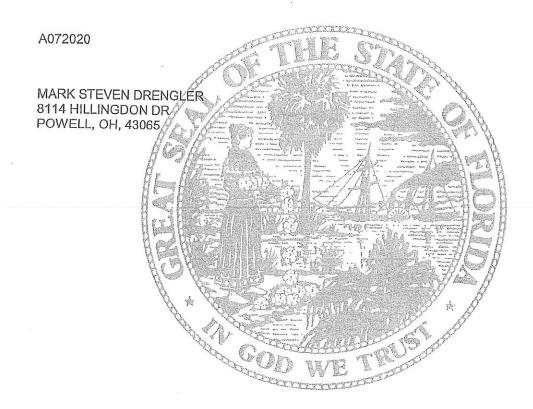
Cynthia a. Takai

I, Randall Musselman, Secretary of THE GUARANTEE COMPANY OF NORTH AMERICA USA, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney executed by THE GUARANTEE COMPANY OF NORTH AMERICA USA, which is still in full force and effect.

IN WITNESS WHEREOF, I have thereunto set my hand and attached the seal of said Company this 25th day of August, and

Korassepuende

Randall Musselman, Secretary



Attached is your FL Department of Financial Services license. Please remember to sign the back of your card. If you have any questions please contact the FL Department of Financial Services at (850) 413-3137.

TOM GALLAGHER
Chief Financial Officer
State of Florida:

MARK-STEVEN DRENGLER
License Number A072020
IS LICENSE Number A072020
IS LICENSE TO TRANSACT HE FOLLOWING CLASSES OF INSURANCE GENERAL Lines (Prop. a. Cas) 10/29/1993

NON-RESIDENT
LICENSE

"NOTICE" - This non-resident license is firmled to the plasses of insurance state. Please be governed occordingly.

The accesses must naive an active appointment with the field at analysis of a Americans of services are owing marketed.

INFORMATION REQUIRED FROM BIDDERS

GENERAL INFORMATION

The Bidder shall furnish the following information. Failure to comply with this requirement may cause its rejection. Additional sheets shall be attached as required.

1.	Contractor's Name/Address:
	Emmars PA 18049
•	
2.	and e-mail address: dennis. devr Solutionwer Long
3.	Contractor's License (attach copy):
	Primary Classification:
	Broward County License Number (attach copy):
4.	Number of years as a Contractor in construction work of the type involved in this Contract:
5.	List the names and titles of <u>all</u> officers of Contractor's firm:
6.	Name of person who inspected site or proposed work for your firm: Name: Penns L. Pen
	Date of Inspection: 4 Avant 2016

7.	What is the last project	of this nature you hallywood, F	4 - Mainte	1	round and
8.	Have you ever failed to	complete work	awarded to yo	u; if so, where a	and why?
9.	Name three individuals to which you refer:	or corporations tollywood adelphia PA pa, FL- Jol	François	Domond of aukson 215	ed work and 154-921-352; 5-685-4649 - 297-9649
10.	List the following inform submission of this proposentures).		co-venture, li	st the information	on for all co-
	Name of Project	City	Total Contract Value	Contracted Date of Completion	% Completion to Date
	Crup Plant, Rehalo	Tampa FL	# 3,8 nn	Seat. 2016	80%
	Cryo Plant Maint	Boston, MA	\$1.5 MM	Jam 2017	85%
	Cryo Plant Maint	Phil. PA	\$1.0 MM	Oct. 2016	90%
	Cryo Plant Maint.	Amherst, WY	\$155M	Oct. 2016	90%
	(Contin	ue list on inset s	heet, if neces	sary)	
11.	What equipment do you Manie shoo Instruments	Edulleg a		and power	tool

2.	What equipment will you purchase for the proposed work?				
	None				
	NOTE: If requested by CITY, the Bidder shall furnish a notarized financial statement,				
	references and other information, sufficiently comprehensive to permit an appraisal of its current financial condition.				

LIST OF SUBCONTRACTORS

The Bidder shall list below the name and address of each Subcontractor who will perform work under this Contract in excess of one-half percent of the total bid price, and shall also list the portion of the work which will be done by such Subcontractor. After the opening of Proposals, changes or substitutions will be allowed with written approval of the City of Hollywood. Subcontractors must be properly licensed and hold a valid Hollywood Certificate of Competency.

	Work to be Performed	Subcontractor's Name / Address
1.	Perlite hadling services	
2.	Alminum welding	
3.	Mechanical services	
4.	Relief value certifications	
5.		
6.		
7.		
8.		
9.		
10.		
10.		

- END OF SECTION -

NOTE: Attach additional sheets if required.

LOCAL PREFERENCE (EXHIBIT "A")

Pursuant to §38.50 of the City of Hollywood Code of Ordinances, the City shall grant a preference to local Hollywood vendors if their initial bid is within 5% of the bid of the lowest responsive responsible bidder that is a non-local Hollywood vendor. The preference shall allow the local Hollywood vendor to submit a second and final offer, which must be at least 1% less than the bid of the lowest responsible responsive non-local Hollywood vendor to be awarded. The local Hollywood vendor shall have the burden of demonstrating that it maintains a permanent place of business with full-time employees within the City limits and has done so for a minimum of one (1) year prior to the date of issuance of a bid or proposal solicitation within Hollywood, Florida. All supporting documentation (e.g. City of Hollywood valid local business tax receipt) for local preference eligibility must be received with the bid package prior to the bid opening date and time.

CONTRACT

THIS AGREEMENT, made and entered into, this day of, A.D.,,				
by and between the CITY OF HOLLYWOOD, Florida, a municipal corporation of the				
State of Florida, part of the first part, (hereinafter sometimes called the "CITY"), and				
party of the second part				
(hereinafter sometimes called the "CONTRACTOR").				
WITNESSETH: The parties hereto, for the considerations herein- after set forth, mutually agree as follows:				
Article 1. Scope of Work: The CONTRACTOR shall furnish all labor, materials, and equipment and perform all work in the manner and form provided by the Contract Documents, for:				
Cryogenic Plant Turnaround Maintenance – Year 2016 CITY PROJECT NO. 16-9415				
Article 2. The Contract Sum: The CITY shall pay to the CONTRACTOR, for the faithful performance of the Contract, in lawful money of the United States of America, and subject to additions and deductions as provided in the Contract Documents, as follows:				
Based upon the prices shown in the Proposal heretofore submitted to the CITY by the CONTRACTOR, a copy of said Proposal being a part of these Contract Documents, the aggregate amount of this Contract being the sum of				
Article 3. Partial and Final Payments: In accordance with the provisions fully set forth in the "General Conditions" of the "Specifications", and subject to additions and deductions as provided, the CITY shall pay the CONTRACTOR as follows:				
(a) On the 15th day, or the first business day thereafter, of each calendar month, the CITY shall make partial payments to the CONTRACTOR on the basis of a duly certified and approved estimate of work performed during the preceding calendar month by the CONTRACTOR, less ten percent (10%) of the amount of such estimate which is to be retained by the CITY until all work has been performed strictly in accordance with this Agreement and until such work has been accepted by the CITY; provided, however, that after 50 percent (50%) completion of the work covered by this Agreement, (i) the amount retained				

retainage are further specified in Florida Statute Section 218.735.

from each subsequent progress payment shall be reduced to 5 percent (5%) and (ii) upon presentation by the CONTRATOR of a payment request for up to one-half of the retainage held by the CITY, the CITY shall promptly make payment to the CONTRACTOR. The parties' rights and obligations regarding

(b) Upon submission by the CONTRACTOR of evidence satisfactory to the CITY that all payrolls, material bills and other costs incurred by the CONTRACTOR in connection with the construction of the WORK have been paid in full, and also, after all guarantees that may be required in the Specifications have been furnished and are found acceptable by the CITY, final payment on account of this Agreement shall be made within sixty (60) days after completion by the CONTRACTOR of all work covered by this Agreement and acceptance of such work by the ENGINEER and approved by the CITY.

<u>Article 4</u>. Time of Completion: The CONTRACTOR shall commence work to be performed under this Contract within ten (10) consecutive calendar days after date of written Notice To Proceed and shall fully complete the Contract in accordance within the Contract Documents and meet all intermediate milestone completion dates required after said date of written notice as set forth in the Proposal, as may be modified by Instructions to Bidders, and stated in the Notice to Proceed.

It is mutually agreed between the parties hereto, that time is the essence, and in the event that construction of the WORK is not completed within the Contract Time and per intermediate dates, as may have been modified solely in accordance with the General Conditions of this Contract, that from the compensation otherwise to be paid to the CONTRACTOR, the CITY is authorized and shall retain, for each day thereafter, Sundays and holidays included, the sum set forth in the Supplementary General Conditions of this Contract as liquidated damages sustained by the CITY in the event of such default by the CONTRACTOR, or shall withhold such compensation for actual and consequential damages as my be stated therein or contemplated therefrom.

Article 5. Additional Bond: It is further mutually agreed between the parties hereto, that if, at any time after the execution of this Agreement and the Payment and Performance Bonds required herein for the express purpose of assuring the faithful performance of the Contractor's work hereto attached, the CITY shall deem the surety or sureties' to be unsatisfactory, or, if for any reason, said bonds cease to be adequate to cover the performance of the work, the CONTRACTOR shall, at his expense, within five (5) days after receipt of notice from the CITY furnish an additional bond or bonds in such form and amount, and with such surety or sureties as shall be satisfactory to the CITY. In such event, no further payment to the CONTRACTOR shall be deemed to be due under this agreement until such new or additional security for the faithful performance of the work shall be furnished in manner and form satisfactory to the CITY.

Article 6. Contract Documents: All of the documents hereinafter listed form the Contract and they are as fully a part of the Contract as if hereto attached, or repeated in this Agreement:

- 1. Notice to Bidders
- 2. Instruction to Bidders
- Proposal
- 4. Proposal Bid Form
- Bid Bond
- 6. Information Required from Bidders
- 7 Local Preference (Exhibit "A")
- 8. Trench Safety Form

- 9. Contract
- 10. Performance Bond
- 11. Payment Bond
- 12. General Conditions
- 13. Supplementary General Conditions
- 14 Addenda
- 15. Specifications
- 16. Drawings

Article 7. The rate of wages and fringe benefits, or cash equivalent, for all laborers, mechanics and apprentices employed by any contractor or subcontractor on the work covered by the contract shall be not less than the prevailing rate of wages and fringe benefit payments or cash equivalent for similar skills or classifications of work as established by the General Wage Decision by the United States Department of Labor for Broward County, Florida that is in effect prior to the date the city issues its invitation for bids. If the General Wage Decision fails to provide for a fringe benefit rate for any worker classification, then the fringe benefit rate applicable to the worker classification shall be the fringe benefit rate applicable to the worker classification for which no fringe benefit rate has been provided.

Article 8. No additional work or extras shall be performed unless the same be duly authorized by appropriate action of the City.

Article 9. That in the event either party brings suit for enforcement of disagreement, the prevailing party shall be entitled to attorney's fees and court costs in addition to any other remedy afforded by law.

Article 10. The Contractor shall guarantee the complete project against poor workmanship and faulty materials for a period of twelve (12) months after final payment and shall immediately correct any defects which may appear during this period upon notification by the City or the Engineer.

Article 11

of all claims by the Contractor, except the	se previously made and still unsettled.
**************************************	**************************************
IN WITNESS WHEREOF the parties heret date first above written in three (3) coun accounting for the other counterparts, be d	o have executed this Agreement on the day and terparts, each of which shall, without proof or eemed an original contract:
THE CITY OF HOLLYWOOD, FLORIDA Party of the First Part	
By: PETER BOBER, MAYOR	(SEAL)

The making and acceptance of the final navment shall constitute a waiver

PATRICIA A. CERNY, MMC City Clerk

**************************************	**************************************	*****
CONTRACTOR Party of the Second Part		
WHEN THE CONTRACTOR IS AN INDI	VIDUAL:	
Signed, sealed and delivered in the prese	ence of:	
(Witness)	(Signature of Individual)	(SEAL)
(Witness)	(Signature of Individual)	
**************************************	**************************************	******
WHEN THE CONTRACTOR IS A SOLE A TRADE NAME:	PROPRIETORSHIP OR <u>OPERATES</u>	<u>JNDER</u>
Signed, sealed and delivered in the prese	ence of:	
(Witness)	(Name of Firm)	
(Witness)	(Signature of Individual)	(SEAL)
**************************************	**************************************	*****
WHEN THE CONTRACTOR IS A PARTN	IERSHIP:	
(Witness)	(Name of Firm) a Partnership	
(Witness)	BY: (Partner)	(SEAL)
***********************************	***************	*****

WHEN THE CO	ONTR	<u>ACTO</u>	R IS A CO	DRPOR	ATION:	
Attest:						
Secretary						
				((Correct Name of Corporation)	
				BY: P	resident	(SEAL)
********* ****	****	*****	******	*****	*************************************	******
APPROVED LEGALITY for the use and City of Hollywood	relian	ce of t	he	AND	APPROVED AS TO FINANCE:	
By			y 50		By Financial Services Department Dire	ector

CERTIFICATE

STATE OF FLORIDA) COUNTY OF BROWARD)

/	HEREBY	CERTIFY	that	a me	eting	of	the	Board	of	Directors	of
, а с 20_	orporation u _, and the f	ınder the lav following res	s of the	State o	of ly pass	PA ed ar	, wand add	ras held o	on <u>13</u>	August ?	2016
	be and l corporat the corp	.VED, that $\sqrt{2}$ he is hereby ion, and that oration and this corporate.	authori: t his ex with corp	zed to ecution	execut n there	te the of, a	conti ttested	acts on by the	beha Secr	lf of this etary of	
l fu	I further certify that said resolution is now in full force and effect.										
IN '	WITNESS V	WHEREOF,	l have h	iereunt	to set r	ny ha	and ar	nd affixed	d the	official sea	l of
the	corporation	, this	_day of		A		, 20	D			
					Seci	retary	/				

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRE	SENIS.	
That we		
Name	Address	Tel. No.
as Principal, and		
Name	Address	Tel. No.
as Surety, are held and firmly	bound unto the City of Hollywo	
),
for the payment of said sum we b	ind ourselves, our heirs, executors,	administrators and
	the faithful performance of a certa	
dated the		
	e Principal and the City of Hollywo	
installation of Cryogenic Plant T	urnaround Maintenance – Year	2016, City Project
No. 16-9415.		

A copy of said Contract, No. <u>16-9415</u>, is incorporated herein by reference and is made a part hereof as if fully copied herein.

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION ARE SUCH, that if the Principal shall in all respects comply with the terms and conditions of said Contract and his obligations thereunder, including all of the Contract Documents (that include the Notice to Bidders, Instructions to Bidders, Proposal, Proposal Bid Form, Basis of Payment, Approved Bid Bond, Trench Safety Form, Information Required from Bidders, Contract, Performance Bond, Payment Bond, General and Supplementary General Conditions, Technical Specifications, Addenda and Drawings), therein referred to and made a part thereof, and such alterations as may be made in said Drawings and Specifications as therein provided for, and shall indemnify and save harmless the City of Hollywood against and from all expenses, damages, injury or conduct, want of care of skill, negligence or default, including patent infringement on the part of said Principal, his agents or employees, in the execution or performance of said Contract, including errors in the Drawings furnished by said Principal, and further, if the Principal shall promptly make payments to all who supply him, with labor and/or materials, used directly or indirectly by the Principal in the prosecution of the work provided for in said Contract, then this obligation shall be null and void; otherwise, the Principal and Surety, jointly and severally, agree to pay the City of Hollywood any difference between the sum that the City of Hollywood may be obliged to pay for the completion of said work, by Contract or otherwise, and the sum that the City of Hollywood would have been obliged to pay for the completion said work had the Principal properly executed all of the provisions of said Contract, and any damages, whether direct, indirect, or consequential, which the City of Hollywood may incur as a result of the failure of the said Principal to properly execute all of the provisions of said Contract.

AND, the said Principal and Surety hereby further bind themselves, their successors, executors, administrators and assigns, jointly and severally, that they will amply and fully protect the City of Hollywood against, and will pay any and all amounts, damages, costs

and judgments which may be recovered against or which the Owner may be called upon to pay to any person or corporation by reason of any damage arising from the performance of the said work, repair or maintenance thereof, or the manner of doing the same, or his agents or his servants, or the infringements of any patent rights by reason of the use of any material furnished or work done, as aforesaid or otherwise.

AND, the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the Specifications and Drawings accompanying the same, shall in any way affect its obligations on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the Specifications and Drawings.

WHEN THE PRINCIPAL IS AN INDIVIDUAL:

Signed, sealed and delivered in the	oresence of:
(Witness)	(Signature of Individual)
(Address)	(Printed Name of Individual)
(Witness)	
(Address)	
WHEN THE PRINCIPAL IS A SOL TRADE NAME:	E PROPRIETORSHIP OR OPERATES UNDER A
Signed, sealed and delivered in the p	presence of:
(Witness)	(Name of Firm)
(Address)	By: (Seal) (Signature of Individual)
(Witness)	
Address	
********	والمراكبة المراكبة ال

WHEN THE PRINCIPAL IS A PARTNERSHIP: Signed, sealed and delivered in the presence of: (Name of Partnership) (Witness) By: (Seal) (Partner) (Address) (Printed Name of Partner) (Witness) Address WHEN THE PRINCIPAL IS A CORPORATION: Attest: (Name of Corporation) (Secretary) By: (Seal) (Affix Corporate Seal) (Printed Name) (Official Title) CERTIFICATE AS TO CORPORATE PRINCIPAL ____, certify that I am the Secretary of the corporation named as Principal in the within bond; that , who signed the said bond of said behalf of the Principal was then ___ corporation; that I know his signature, and his signature thereto is genuine; and that said Bond was duly signed, sealed and attested for and on behalf of said corporation by authority of its governing body.

Secretary

_____(SEAL)

TO BE EXECUTED BY CORPORATE SURETY

Attest:	
(Secretary)	(Corporate Surety)
	(Business Address)
	By:(Affix Corporate Seal)
	(Attorney-In-Fact)
	(Name of Local Agency)
	(Business Address)
STATE OF FLORIDA	
appeared, me first duly sworn upon oath, says	missioned, qualified and acting, personall to me well known, who being by that he is the attorney-in-fact for the and that he has been authorized by execute the foregoing bond on behalf of the le City of Hollywood, Florida.
Subscribed and sworn to before me this 20	day of
Notary Public, State of Florida My Commission Expires:	·*******************
APPROVED AS TO FORM AND EGALITY for the use and reliance of the City of Hollywood, Florida only:	
By JEFFREY P. SHEFFEL	Ву
City Attorney	Financial Services Department Director

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS:

That we,				
Name		Address	Te	el. No.
As Principal and				
	Name	Address	Te	el. No.
as Surety, are h City, in the sum	eld and firmly bound	to the CITY OF HOLLYW	OOD, FLORIDA herein ca	lled the
Dollars (\$)	or the payment of said s	um we bind ourselves, ou	r heirs,
executors, admi	nistrators and assign	s, jointly and severally,	for the faithful performance	e of a
certain written co	ontract dated the	day of	20	
entered into bet	ween the Principal ar	nd the City of Hollywood,	Florida for the installation	of the
Cryogenic Plan	t Turnaround Mainte	enance - Year 2016, City	Project No. 16-9415	4110

Which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

THE CONDITION of this bond is that if Principal promptly makes payments to all claimants defined in Section 255.05 (1), F.S., supplying Principal with labor, materials or supplies used directly or indirectly by principal in the prosecution of the work provided for in the Contract, then this bond shall be null and void and of no further force and effect; otherwise to remain in full force and effect.

Said surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or any other changes in or under contract documents and compliance or noncompliance with any formalities connected with the contract does not affect Surety's obligation under this bond and Surety waives notice of any such change, extension of time, alteration or addition to the terms of the Contract or any other changes, compliance, or noncompliance to the terms of the Contract or to the Work or to the Specifications.

This bond is furnished pursuant to the statutory requirements for bond on public works projects being Florida Statute 255.05. Claimants are hereby notified that the Statute 255.05(2) specifically requires that notice be given to Contractor within 45 days after beginning to furnish labor, materials or supplies for the prosecution of the work that claimants intends to look to the bond for protection. Further notice is hereby given claimants that written notice of nonpayment within ninety (90) days after performance of the labor or after complete delivery of the materials or supplies must be delivered to the Contractor and to the Surety. Further notice is hereby given that no action for labor, materials or supplies may be instituted against the Contractor or the Surety on the bond after one year for the performance of the labor or completion of delivery of the materials or supplies.

Without modifying the foregoing, this bond shall be construed as requiring of the principal and surety no more and no less than is specified in F.S. 255.050.

SIGNED AND SEALED, this	day of,20	
PRINCIPAL:		ē)
ATTEST:		
	(Signature)	-
	(Title)	
(SEAL)		
SURETY:		
ATTEOT	(Surety)	-
ATTEST:		
	(Signature)	
	(Attorney-in-Fact)	
**************************************	**************************************	*****
APPROVED AS TO FORM AND LEGALITY for the use and reliance of the City of Hollywood, Florida only:	APPROVED AS TO FINANCE:	
By JEFFREY P. SHEFFEL	Ву	
City Attorney	Financial Services Department Direc	tor

GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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