# AGREEMENT TO PROVIDE ON-CALL WATER WELL, PUMP, AND MOTOR REHABILITATION AND REPAIR SERVICES

THIS AGREEMENT is made and entered into this 17th day of August, 2021 by and between General Pump Company, Inc. ("Contractor"), and the City of Santa Ana, a charter city and municipal corporation organized and existing under the Constitution and laws of the State of California ("City").

# **RECITALS**

- A. On April 28, 2021, the City issued Request for Proposal No. 21-059, by which it sought a qualified contractor to provide on-call water well, pump, and motor rehabilitation and repair services for the Water Resources Division of the City's Public Works Agency.
- B. Contractor submitted a responsive proposal that was among those selected by the City. Contractor represents that it is able and willing to provide the services described in the scope of work that was included in RFP 21-059.
- C. In undertaking the performance of this Agreement, Contractor represents that it is knowledgeable in its field and that any services performed by Contractor under this Agreement will be performed in compliance with such standards as may reasonably be expected from a professional contracting firm in the field.

**NOW THEREFORE**, in consideration of the mutual and respective promises, and subject to the terms and conditions hereinafter set forth, the parties agree as follows:

#### 1. SCOPE OF SERVICES

On an on-call basis, and at the City's sole discretion, Contractor shall perform the services described in the scope of work that was included in RFP No. 21-059, which is attached as Exhibit A and incorporated in full, and as further described in Contractor's Proposal, which is attached as Exhibit B and incorporated in full.

# 2. COMPENSATION

- a. City neither warrants nor guarantees any minimum or maximum compensation to Contractor under this Agreement. Contractor shall be paid only for actual services performed under this Agreement at the rates and charges identified in Exhibit B. Contractor is one of three (3) contractors selected to provide services on an asneeded basis under RFP 21-059. The total compensation for services provided by all contractors selected under RFP 21-059 shall not exceed the shared aggregate amount of three million two hundred fifty thousand dollars and zero cents (\$3,250,000) during the term of this agreement, including any extension periods.
- b. Payment by City shall be made within forty-five (45) days following receipt of

proper invoice evidencing work performed, subject to City accounting procedures. Payment need not be made for work which fails to meet the standards of performance set forth in the Recitals and Scope of Work, which may reasonably be expected by City.

# 3. TERM

This Agreement shall commence on the date first written above and terminate on August 16, 2024, unless terminated earlier in accordance with Section 17, below. The term of this Agreement may be extended for one 2-year period upon a writing executed by the City Manager and City Attorney.

# 4. PREVAILING WAGES

Contractor is aware of the requirements of California Labor Code Section 1720, et seq., and 1770, et seq., as well as California Code of Regulations, Title 8, Section 16000, et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on "public works" and "maintenance" projects. If the services being performed are part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and the total compensation is \$1,000 or more, Contractor agrees to fully comply with such Prevailing Wage Laws. Contractor shall defend, indemnify and hold the City, its elected officials, officers, employees and agents free and harmless from any claim or liability arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

# 5. INDEPENDENT CONTRACTOR

Contractor shall, during the entire term of this Agreement, be construed to be an independent contractor and not an employee of the City. This Agreement is not intended nor shall it be construed to create an employer-employee relationship, a joint venture relationship, or to allow the City to exercise discretion or control over the professional manner in which Contractor performs the services which are the subject matter of this Agreement; however, the services to be provided by Contractor shall be provided in a manner consistent with all applicable standards and regulations governing such services. Contractor shall pay all salaries and wages, employer's social security taxes, unemployment insurance and similar taxes relating to employees and shall be responsible for all applicable withholding taxes.

#### 6. OWNERSHIP OF MATERIALS

This Agreement creates a non-exclusive and perpetual license for City to copy, use, modify, reuse, or sublicense any and all copyrights, designs, and other intellectual property embodied in plans, specifications, studies, drawings, estimates, and other documents or works of authorship fixed in any tangible medium of expression, including but not limited to, physical drawings or data magnetically or otherwise recorded on computer diskettes, which are prepared or caused to be prepared by Contractor under this Agreement ("Documents & Data"). Contractor shall require all subcontractors to agree in writing that City is granted a non-exclusive and perpetual license for any Documents & Data the subcontractor prepares under this Agreement.

Contractor represents and warrants that Contractor has the legal right to license any and all Documents & Data. Contractor makes no such representation and warranty in regard to Documents & Data which were provided to Contractor by the City. City shall not be limited in any way in its use of the Documents and Data at any time, provided that any such use not within the purposes intended by this Agreement shall be at City's sole risk.

# 7. INSURANCE

Prior to undertaking performance of work under this Agreement, Contractor shall maintain and shall require its subcontractors, if any, to obtain and maintain insurance as described below:

- Commercial General Liability Insurance. Contractor shall maintain commercial a. general liability insurance naming the City, its officers, employees, agents, volunteers and representatives as additional insured(s) and shall include, but not be limited to protection against claims arising from bodily and personal injury, including death resulting therefrom and damage to property, resulting from any act or occurrence arising out of Contractor's operations in the performance of this Agreement, including, without limitation, acts involving vehicles. The amounts of insurance shall be not less than the following: single limit coverage applying to bodily and personal injury, including death resulting therefrom, and property damage, in the total amount of \$2,000,000 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit. Such insurance shall (a) name the City, its officers, employees, agents, volunteers and representatives as additional insured(s); (b) be primary with respect to insurance or self-insurance programs maintained by the City; and (c) contain standard separation of insureds provisions.
- b. Business automobile liability insurance, or equivalent form, with a combined single limit of not less than \$1,000,000 per occurrence. Such insurance shall include coverage for owned, hired and non-owned automobiles.
- c. Worker's Compensation Insurance. In accordance with the California Labor Code, Contractor, if Contractor has any employees, is required to be insured against liability for worker's compensation or to undertake self-insurance. Prior to commencing the performance of the work under this Agreement, Contractor agrees to obtain and maintain any employer's liability insurance with limits not less than \$1,000,000 per accident.
- d. If Contractor is or employs a licensed professional such as an architect or engineer: Professional liability (errors and omissions) insurance, with a combined single limit of not less than \$2,000,000 per claim with \$2,000,000 in the aggregate.
- e. The following requirements apply to the insurance to be provided by Contractor pursuant to this section:
  - (i) Contractor shall maintain all insurance required above in full force and

- effect for the entire period covered by this Agreement.
- (ii) Certificates of insurance shall be furnished to the City upon execution of this Agreement and shall be approved by the City.
- (iii) Certificates and policies shall state that the policies shall not be cancelled or reduced in coverage or changed in any other material aspect, by contractor, without thirty (30) days prior written notice to the City.
- (iv) Contractor shall supply City with a fully executed additional insured endorsement.
- f. If Contractor fails or refuses to produce or maintain the insurance required by this section or fails or refuses to furnish the City with required proof that insurance has been procured and is in force and paid for, the City shall have the right, at the City's election, to forthwith terminate this Agreement. Such termination shall not affect Contractor's right to be paid for its time and materials expended prior to notification of termination. Contractor waives the right to receive compensation and agrees to indemnify the City for any work performed prior to approval of insurance by the City.

# 8. INDEMNIFICATION

Contractor agrees to defend, and shall indemnify and hold harmless the City, its officers, agents, employees, contractors, special counsel, and representatives from liability: (1) for personal injury, damages, just compensation, restitution, judicial or equitable relief arising out of claims for personal injury, including death, and claims for property damage, which may arise from the negligent operations of the Contractor or its subcontractors, agents, employees, or other persons acting on their behalf which relates to the services described in section 1 of this Agreement; and (2) from any claim that personal injury, damages, just compensation, restitution, judicial or equitable relief is due by reason of the terms of or effects arising from this Agreement. This indemnity and hold harmless agreement applies to all claims for damages, just compensation, restitution, judicial or equitable relief suffered, or alleged to have been suffered, by reason of the events referred to in this Section or by reason of the terms of, or effects, arising from this Agreement. The Contractor further agrees to indemnify, hold harmless, and pay all costs for the defense of the City, including fees and costs for special counsel to be selected by the City, regarding any action by a third party challenging the validity of this Agreement, or asserting that personal injury, damages, just compensation, restitution, judicial or equitable relief due to personal or property rights arises by reason of the terms of, or effects arising from this Agreement. City may make all reasonable decisions with respect to its representation in any legal proceeding. Notwithstanding the foregoing, to the extent Contractor's services are subject to Civil Code Section 2782.8, the above indemnity shall be limited, to the extent required by Civil Code Section 2782.8, to claims that arise of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Contractor.

# 9. INTELLECTUAL PROPERTY INDEMNIFICATION

Contractor shall defend, indemnify and hold harmless the City, its officers, agents, representatives, and employees against any and all liability, including costs, and attorney's fees,

for infringement of any United States' letters patent, trademark, or copyright contained in the work product or documents provided by Contractor to the City pursuant to this Agreement.

#### 10. RECORDS

Contractor shall keep records and invoices in connection with the work to be performed under this Agreement. Contractor shall maintain complete and accurate records with respect to the costs incurred under this Agreement and any services, expenditures, and disbursements charged to the City for a minimum period of three (3) years, or for any longer period required by law, from the date of final payment to Contractor under this Agreement. All such records and invoices shall be clearly identifiable. Contractor shall allow a representative of the City to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this Agreement during regular business hours. Contractor shall allow inspection of all work, data, documents, proceedings, and activities related to this Agreement for a period of three (3) years from the date of final payment to Contractor under this Agreement.

# 11. CONFIDENTIALITY

If Contractor receives from the City information which due to the nature of such information is reasonably understood to be confidential and/or proprietary, Contractor agrees that it shall not use or disclose such information except in the performance of this Agreement, and further agrees to exercise the same degree of care it uses to protect its own information of like importance, but in no event less than reasonable care. "Confidential Information" shall include all nonpublic information. Confidential information includes not only written information, but also information transferred orally, visually, electronically, or by other means. Confidential information disclosed to either party by any subsidiary and/or agent of the other party is covered by this Agreement. The foregoing obligations of non-use and nondisclosure shall not apply to any information that (a) has been disclosed in publicly available sources; (b) is, through no fault of the Contractor disclosed in a publicly available source; (c) is in rightful possession of the Contractor without an obligation of confidentiality; (d) is required to be disclosed by operation of law; or (e) is independently developed by the Contractor without reference to information disclosed by the City.

# 12. CONFLICT OF INTEREST CLAUSE

Contractor covenants that it presently has no interest and shall not have interests, direct or indirect, which would conflict in any manner with performance of services specified under this Agreement.

#### 13. NOTICE

Any notice, tender, demand, delivery, or other communication pursuant to this Agreement shall be in writing and shall be deemed to be properly given if delivered in person or mailed by first class or certified mail, postage prepaid, or sent by fax or other telegraphic communication in the manner provided in this Section, to the following persons:

To City: Clerk of the City Council

City of Santa Ana

20 Civic Center Plaza (M-30)

P.O. Box 1988

Santa Ana, CA 92702-1988

Fax 714- 647-6956

Executive Director Public Works Agency City of Santa Ana

20 Civic Center Plaza (M-21)

P.O. Box 1988

Santa Ana, CA 92702

To Contractor: General Pump Company, Inc.

159 N. Acacia Street San Dimas, CA 91773

Attn: Michael Bodart, President

A party may change its address by giving notice in writing to the other party. Thereafter, any communication shall be addressed and transmitted to the new address. If sent by mail, communication shall be effective or deemed to have been given three (3) days after it has been deposited in the United States mail, duly registered or certified, with postage prepaid, and addressed as set forth above. If sent by fax, communication shall be effective or deemed to have been given twenty-four (24) hours after the time set forth on the transmission report issued by the transmitting facsimile machine, addressed as set forth above. For purposes of calculating these timeframes, weekends, federal, state, County or City holidays shall be excluded.

# 14. EXCLUSIVITY AND AMENDMENT

This Agreement represents the complete and exclusive statement between the City and Contractor regarding the subject matter herein, and supersedes any and all other agreements, oral or written, between the parties. In the event of a conflict between the terms of this Agreement and any attachments hereto, the terms of this Agreement shall prevail. This Agreement may not be modified except by written instrument signed by the City and by an authorized representative of Contractor. The parties agree that any terms or conditions of any purchase order or other instrument that are inconsistent with, or in addition to, the terms and conditions hereof, shall not bind or obligate Contractor or the City. Each party to this Agreement acknowledges that no representations, inducements, promises or agreements, orally or otherwise, have been made by any party, or anyone acting on behalf of any party, which are not embodied herein.

# 15. ASSIGNMENT

Inasmuch as this Agreement is intended to secure the specialized services of Contractor, Contractor may not assign, transfer, delegate, or subcontract any interest herein without the prior written consent of the City and any such assignment, transfer, delegation or subcontract without the City's prior written consent shall be considered null and void. Nothing in this Agreement shall be construed to limit the City's ability to have any of the services which are the subject to this Agreement performed by City personnel or by other contractors retained by City.

#### 16. WAIVER

No waiver of breach, failure of any condition, or any right or remedy contained in or granted by the provisions of this Agreement shall be effective unless it is in writing and signed by the party waiving the breach, failure, right or remedy. No waiver of any breach, failure or right, or remedy shall be deemed a waiver of any other breach, failure, right or remedy, whether or not similar, nor shall any waiver constitute a continuing waiver unless the writing so specifies.

# 17. TERMINATION

This Agreement may be terminated by the City upon thirty (30) days written notice of termination. In such event, Contractor shall be entitled to receive and the City shall pay Contractor compensation for all services performed by Contractor prior to receipt of such notice of termination, subject to the following conditions:

- a. As a condition of such payment, the Executive Director may require Contractor to deliver to the City all work product completed as of such date, and in such case such work product shall be the property of the City unless prohibited by law, and Contractor consents to the City's use thereof for such purposes as the City deems appropriate.
- b. Payment need not be made for work that fails to meet the standard of performance specified in the Recitals of this Agreement.

# 18. NON-DISCRIMINATION

Consultant shall not discriminate because of race, color, creed, religion, sex, marital status, sexual orientation, gender identity, gender expression, gender, medical conditions, genetic information, or military and veteran status, age, national origin, ancestry, or disability, as defined and prohibited by applicable law, in the recruitment, selection, teaching, training, utilization, promotion, termination or other employment related activities or any services provided under this Agreement. Consultant affirms that it is an equal opportunity employer and shall comply with all applicable federal, state and local laws and regulations.

# 19. JURISDICTION-VENUE

This Agreement has been executed and delivered in the State of California and the validity, interpretation, performance, and enforcement of any of the clauses of this Agreement shall be determined and governed by the laws of the State of California. Both parties further agree that Orange County, California, shall be the venue for any action or proceeding that may be brought or arise out of, in connection with or by reason of this Agreement.

#### 20. PROFESSIONAL LICENSES

Contractor shall, throughout the term of this Agreement, maintain all necessary licenses, permits, approvals, waivers, and exemptions necessary for the provision of the services hereunder and required by the laws and regulations of the United States, the State of California, the City of Santa Ana and all other governmental agencies. Contractor shall notify the City immediately and in writing of its inability to obtain or maintain such permits, licenses, approvals, waivers, and exemptions. Said inability shall be cause for termination of this Agreement.

# 21. MISCELLANEOUS PROVISIONS

ATTEST:

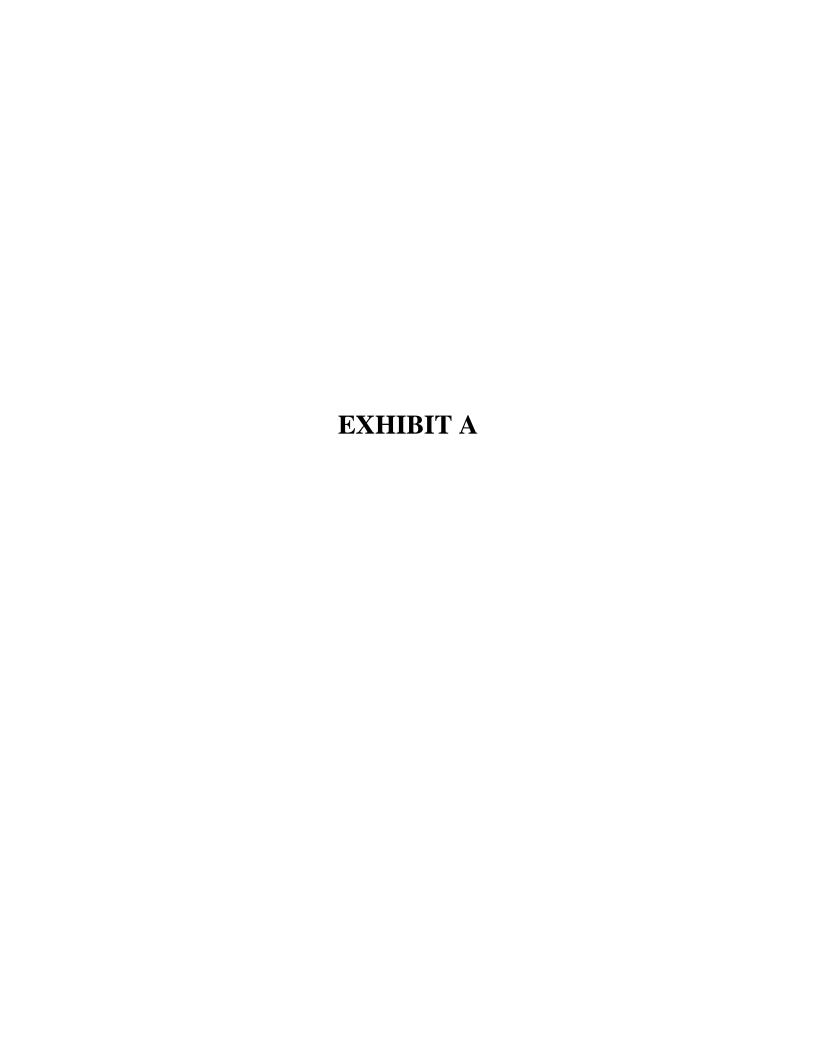
Executive Director Public Works Agency

- a. Each undersigned represents and warrants that its signature herein below has the power, authority and right to bind their respective parties to each of the terms of this Agreement, and shall indemnify City fully, including reasonable costs and attorney's fees, for any injuries or damages to City in the event that such authority or power is not, in fact, held by the signatory or is withdrawn.
- b. All exhibits referenced herein and attached hereto shall be incorporated as if fully set forth in the body of this Agreement.

CITY OF SANTA ANA

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the date and year first above written.

Daisy Gomez	Kristine Ridge
Clerk of the Council	City Manager
APPROVED AS TO FORM SONIA R. CARVALHO City Attorney	CONTRACTOR
By: Brandon Salvatierra Deputy City Attorney	Name: Michael Bodart Title: President/ Director of Engr.
RECOMMENDED FOR APPROVAL	
Nahil Saha PF	



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# Appendix ATTACHMENT 1: SCOPE OF WORK

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# WATER WELL, PUMP AND MOTOR REHABILITATION AND REPAIR SERVICES

# SCOPE OF WORK

# INTRODUCTION AND BACKGROUND

The City of Santa Ana is soliciting proposals from qualified firms to provide on-call water well, pump and motor rehabilitation and repair services on an as-needed basis.

The City of Santa Ana is located in the County of Orange in Southern California. The City encompasses 27.2 square miles and a population over 343,000 people. The City of Santa Ana Public Works Agency – Water Resources Division oversees and maintains the daily operations of the Water System and Sanitary Sewer System. The City of Santa Ana's water system has an average day demand of about 43 million gallons (MG) with 45,000 services. It is comprised of approximately 478 miles of water main, 45 MG of storage at five (5) sites, seven (7) MWD connections, 21 groundwater wells, seven (7) pump stations, four (4) pressure regulating stations and utilizes two (2) pressure zones.

# WORK DESCRIPTION

The Contractor shall provide water well casing, pump and motor rehabilitation, repair, and replacement related services for the City of Santa Ana at various locations within the City. The work shall include routine and emergency pump pulling and installations, well casing repairs and installations, water well rehabilitations, well video inspections, and/or repair services on various types of pumps on an as-needed basis.

The Contractor shall provide all necessary supervision, labor, materials, tools, transportation and equipment to perform pump pulling and installations, water well and booster rehabilitations, well casing repairs and installations, water well video inspections and chemical treatments, electric motor rewindings, sound attenuation, and repair services on various types of pumps and motors, on an as assigned basis, at various locations throughout the City.

The Contractor shall provide transportation for its heavy duty equipment, such as, but not limited to, drilling rig, pump rig, flatbed truck, boom truck, tractor trailer, to and from Contractor's facility to each Water Production worksite. All electric motor repair work shall be transported by the Contractor to an Electrical Apparatus Service Association's (EASA) Accredited Member facility for repair and returned to the City when repairs are complete.

The Contractor shall make adequate provisions for the disposal of water pumping from the well during redevelopment and/or test pumping. All water discharged during these events shall be in compliance with the City's National Pollutant Discharge Elimination System (NPDES) permits and Orange County Flood Control District permits. It shall be the Contractor's responsibility to propose a method to discharge water that is NPDES compliant and may include methods such as water detention through storage tanks or other conforming strategies.

Proposer shall submit hourly rates schedule, which shall include but not limited to, direct and indirect costs for labor, for staff per job classification, material, equipment rates, overhead, incidental supplies, travel, mileage, and fuel. Any special materials will be purchased by the contractor only after discussed and authorized by the City projects manager or designee in writing.

Prior to commencement of services, Contractor shall provide separate quotes and project schedules, upon request by the City, which shall be approved by the City's Public Works Water Resources Division.

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# CONTRACTOR RESPOSIBILITIES

The Contractor's services shall include, but are not necessarily limited to, the following:

#### 1. PUMP AND MOTOR REMOVAL SERVICE

The Contractor shall be qualified to perform water well pump and booster pump removals. At the initial setup for pulling a pump, the Contractor shall perform lockout/tagout of the electrical and hydraulic systems and shall disconnect all electrical wiring and appurtenance necessary for the pulling of a deep well pump or a booster pump. The motor, discharge head, submersible cables, column, bowl assembly, strainer, and airline shall be removed by the Contractor. All parts and components shall be inspected closely for excessive cracks, corrosion, holes, wear, or any type of damage which would necessitate repairs or replacement parts. Bore holes shall not be left unattended. The Contractor shall provide equipment necessary (with a lockable design) for closing off any bore holes left unattended.

# 2. PUMP AND MOTOR RE-INSTALLATION SERVICE

The Contractor shall be qualified to perform pump and motor installation services including all electrical reinstallations. The Contractor shall adequately chlorinate the pump assembly prior to installation. After the completion of any rehabilitation work and or repairs, the Contractor shall install the bowl assembly, column, shaft, submersible cable or oil tubing, discharge head, motor and all electrical components associated with and not limited to leads, torqueing to specifications, etc. Witness test shall be performed by City staff. All incidental materials shall be furnished by the Contractor.

# 3. WELL VIDEO SURVEY SERVICE

The Contractor shall be qualified to perform water well video inspections using color video equipment with side scan and down-hole survey views. Videos shall be provided to the City in a universal serial bus (USB) format and recorded in high definition resolution. Ability to perform these surveys at high resolutions will be given higher consideration. The Contractor shall allow water to flow into the well for a 24 to 48 hour time period in advance of the video survey to produce clear viewing conditions.

The video survey unit shall simultaneously transpose the City's name, well name, footage and the date of inspection on the monitor screen and the video record. A footage counter/recorder shall read in feet and be accurate within two (2) percent of the actual footage.

The video survey camera shall be capable of right angle or normal downhole viewing with a change in camera lens or mechanical movement of the camera. At the direction of the City, the Contractor must be able to provide right angle viewing to view any casing section in a direct elevation view. The video camera shall be capable of providing both vertical and horizontal (side) viewing of the entire casing as it descends into the well.

The Contractor shall also submit a written report to accompany the video survey log, documenting the survey date, static water level, perforation depth intervals and conditions, and total well depth along with photos. The Contractor shall provide information in the report regarding any type of damage to the well casing or issues encountered during the well video survey.

#### 4. WELL TREATMENT SERVICE

The Contractor shall be qualified to provide well treatment services. To perform these tasks, the Contractor shall have the capability to perform mineral analysis, chemical treatment, water quality testing, zone

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testing, well casing patches and similar casing repairs/improvements, and mechanical treatment on well casings. All chemicals used in treating wells shall be State approved for the purpose intended, must be National Sanitation Foundation (NSF) approved, and Public Works approved for quantity and concentration. Disinfection of the wells is required in accordance with American Water Works Association (AWWA) C654 – Standard Disinfection of Wells.

The Contractor's estimates shall include the type and concentration of chemicals (acids, inhibitors, polymers, neutralizers, etc.) to be used; the typical appropriate contact time for the chemicals; and the typical procedure for introducing, mixing, and neutralizing chemicals in the well. In addition, the name(s) and phone numbers of any company(ies) that will supply the treatment chemicals shall be provided. Completed Material Safety Data Sheets (MSDS) for all chemicals used shall include the methods of mechanical treatment (dual swab, wire/nylon brush, sonar jetting, etc.).

The Contractor shall perform wire brushing and it shall be carried out in manner as to clean the casing louvers/perforations and to remove scale and tubercles attached to the wall of the casing. After wire brushing, the well shall be allowed to sit for 24 to 48 hours and sediment fill shall be removed from the bottom of the well to the maximum extent possible using a bailer or scow or equivalent retrieval device.

All bailed material (water and sediment) shall be placed in steel drums or appropriate containers. The sediment, after separation from the water, shall be placed in the containers, properly labeled, and eventually removed from the well site for disposal by the Contractor. All bailed material shall be properly disposed of by the Contractor.

# 5. PUMP AND MOTOR REHABILITATION SERVICE

The Contractor shall provide rehabilitation services when requested by the City. The Contractor shall rehabilitate of one or more of the following pump units:

- Submersibles
- Horizontal split case
- Vertical turbines

Rehabilitation of all pumps and motors may include, but not limited to:

- Line shafts
- Bearings
- Right-angle-gears
- Housing/frame
- Column pipe
- Seals
- Impellers
- Rotor shaft
- Power/control cable attachments
- Thermal/moisture sensors
- Vibrational analysis (include report)
- All other appurtenant components

Upon request, the Contractor shall submit a written proposal to the City for the services described herein. The Contractor shall also include the performance pump curves, manual specifications, and detailed information regarding the new proposed pump and motor within the proposal package. **The Contractor** 

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shall also provide a construction project schedule for each given task order regarding rehabilitation services. All rehabilitation work shall be subject to the Project Manager's written approval prior to commencing any work by the Contractor.

#### 6. ELECTRIC MOTOR REPAIR AND REFURBISHMENT

The successful Contractor shall provide all transportation, labor, materials, tests and equipment, delivery/pick up for the repair and refurbishment of electric motors and perform any recondition or rewiring as necessary to return the equipment fully operational. All electric motor repair shall be done in an EASA Accredited Member service shop, no exceptions.

- a. All work shall be in accordance with the Electrical Apparatus Service Association's (EASA) Recommended Practice, AR100-2020 latest edition and the National Electrical Manufacturers Association (NEMA) standards for service and repair of electrical apparatus. The Contractor shall provide a list of approved vendors upon request.
- b. Work shall be in conformance with standards set by, but not limited to, the following organizations:
  - 1. Underwriters Laboratories (UL)
    - a. Underwriters Laboratories Certified motors shall be recertified after repair.
    - Contractor's shop or his sub-contractor's shop shall be UL-certified to rebuild explosion-proof electric motors for use in hazardous environments.
  - 2. American National Standards Institute (ANSI)
  - 3. American Society for Testing and Materials (ASTM)
  - 4. National Electrical Code (NEC)
  - 5. National Fire Protection Agency (NFPA)
  - 6. National Electrical Manufacturers Association (NEMA)

# c. Recondition/Repair of Electric Motors

Reconditioning/repair of electric motors shall include the testing, disassembling, inspection, cleaning, dipping, baking of windings, replacement of bearings, assembly, testing and painting and at minimum include the following:

# i. Pre-Disassembly Test

- 1. Using a 1000V meg-ohm meter, conduct verification of insulation integrity. Record the insulation resistance of the motor as brought in from the City. Acceptable criteria is 5 meg-ohms or higher.
- 2. Verify that heaters are operational and that other attached features, such as thermocouples, have continuity.
- Single-phase test to check for open rotors. (After disassembly, rotors will be inspected for evidence of damaged, cracked or open circuit bars or end rings. If there is evidence of faults, the rotor will be growl-tested.) The detection of any defect during testing shall be reported promptly to the City.
- 4. Documentation covered under this section shall include the condition of mechanical fits (i.e. shaft run out), cracked, broken or missing parts, test run at full voltage, current readings, meg reading

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# WATER WELL, PUMP AND MOTOR REHABILITATION AND REPAIR SERVICES

and surge comparison test as received. The City shall be notified if acceptable criteria are not met.

# ii. Motor Disassembly

- 1. Completely disassemble motor and steam clean all mechanical parts using a mild detergent compatible with winding insulation; thoroughly rinse; bake dry.
- 2. Disassembly documentation shall include the cause of failure and/or conditions contributing to failure.

# iii. Motor Inspection

- 1. Visually inspect coils and windings for excessive wear, signs of conductor overheating or fatigue that possibly would not be apparent during an electrical test.
- 2. All stators shall be surge- tested with an electronic surge tester specifically designed to apply a surge voltage stress test simultaneously between turns of a coil, between phases, from winding to ground and to detect short-circuited turns in winding under test. Testing shall be per EASA, IEEE 62.2, 112 and 7.2.3 standards. Infrared imaging shall be provided pre and post test.

#### iv. Mechanical Fit

- Measure the bearing bores, shells, housings and shaft journals using a micrometer. Shaft fits
  and housing fits shall comply with AR100-2020. Machine work shall be approved by the Project
  Manager before being performed or machine work may not be paid for. Bearing journals, seal
  surfaces and bearing housing restoration shall be done by metalizing and machining or boring
  and sleeving. Documentation of before and after measurements shall be made.
- 2. Replace bearings per manufacturer's specifications. All grease fittings, plugs, etc. shall be replaced unless otherwise indicated by the Project Manager. Bearings shall be properly lubricated and bearing oil reservoirs shall drained for shipping and installation. The Contractor shall be responsible for filling the bearing oil reservoir upon installation. All equipment shall be tagged with information as to whether or not bearing oil reservoirs were filled and what type of lubricant was used.

# v. Rotor Balancing

- 1. All rotors of motors rated at 50 HP/3600/1800 RPM and above shall be dynamically balanced, with the rotor running at rated speed where practical, but not less than 600 RPM in the balance stand. The balancing speed shall also be rapid enough so the balance machine sensitivity can reliably measure the maximum allowable residual unbalance.
- 2. A printout tape from the balance/analyzer shall be furnished detailing the final balance values. This tape will be attached to the recondition/repair/rewind documents when the motor is delivered.

#### vi. Motor Leads

Motor leads shall be permanently tagged with non-magnetic markers. Motor lead configuration shall not be altered.

#### vii. Insulation

- 1. Windings shall be double-dipped with Class H varnish and baked.
- 2. Machine-finished surfaces bore of the stator lamination and periphery of the rotor laminations shall be cleaned of all varnish and foreign materials. Photo documentation of this process shall be made prior to and after lamination.

#### viii. Final Test

 A 1000 volt meg-ohm meter shall be used to verify insulation continuity. This reading shall be 100 meg-ohms or greater and documented. After reassembly, motor shall be test-run at rated

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# WATER WELL, PUMP AND MOTOR REHABILITATION AND REPAIR SERVICES

voltage and frequency. No load voltage and phase currents shall be recorded. Vibration mils displacement shall be measured and recorded in the horizontal, vertical and axial planes on both ends of the motor, or top and bottom of vertical motors and documentation of current reading and vibration readings shall be provided to the Project Manager.

2. A 5KV meg-ohm meter shall be used to verify insulation continuity of all 4160V motors.

#### ix. Paint

- 1. Exterior of motor shall be properly cleaned of rust and foreign material, prime painted and finish painted with a good grade of machinery enamel, the same color as received unless otherwise specified. Nameplates, machined surfaces and internal parts shall be protected from paint.
- 2. When needed, the interiors of motor frames and parts shall be painted with an insulating paint. This includes rotors, bearing brackets, frame interiors and air deflectors. Windings shall not be painted.

#### x. Incidentals

- 1. In the event that the motor is in poor condition and cannot be repaired, reconditioned or made as new, the Contractor shall notify the Project Manager or Designee immediately.
- 2. All incidental parts requiring replacement, such as bearings, coils, etc. shall be considered included in other items of bid and no additional compensation shall be allowed.

# 7. REWINDING OF ELECTRIC MOTORS

When rewinding is done in conjunction with a recondition or repair, many of the items below will be redundant and shall not be performed or charged. The items below apply to stator only (including all labor, materials and testing necessary for work completion) and shall at a minimum include:

# a. Pre-Disassembly Test

- 1. Using a 1000 meg-ohm meter, conduct verification for insulation integrity. Acceptable criteria is 5 meg-ohms or higher.
- 2. A 5KV meg-ohm meter shall be used to verify insulation integrity of all 4160V motors.
- 3. Verify that heaters are operational and other attached features such as thermocouples have continuity.
- 4. Pre-disassembly documentation shall include the condition of mechanical fits (i.e. shaft run out), cracked, broken or missing parts, test run at full voltage, current readings, meg reading and surge comparison test as received. The Project Manager shall be notified if acceptable criteria are not met.

# b. Stripping

- 1. Windings shall be removed by temperature-controlled burnout with oven temperature suppression. Burn-out temperature shall not exceed 750 degrees Fahrenheit.
- 2. Windings shall be removed in such a fashion not to damage or distort the core iron. Upon removal of the old windings and insulation, the core shall be thoroughly cleaned and inspected for burrs, etc.
- 3. After the burnout procedure, the Contractor shall perform a stator core loss test to ensure the stator laminations are not heat damaged. If the stator core losses exceed four (4) watts per pound of core steel, notify the Project Manager prior to proceeding forward.

#### c. Winding

 General: Rewound motors shall meet or exceed all O.E.M. operating characteristics, unless otherwise specified by the Project Manager. NEMA Class H insulation shall be used, unless otherwise specified. Magnet wire shall be a Quad Build, insulated wire of domestic manufacture that meets or exceeds NEMA specification MW-35A. After winding and prior to resin treatment, windings will be surge-comparison tested and the results documented.

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# WATER WELL, PUMP AND MOTOR REHABILITATION AND REPAIR SERVICES

- 2. The copper cross-sectional area shall be at least as large as the original winding.
- 3. Resin Treatment: Windings shall be double-dipped with Class H varnish and baked.
- Check all coils for overall coil shape. Perform a high frequency turn-to-turn dielectric test (surge test)
  in accordance with IEEE 522. Submit test results to the City. This shall be done prior to installation
  into the stator.

# d. Motor Leads

Motor leads shall be replaced as the original leads. Leads will be permanently tagged with non-magnetic markers. Lead lengths shall be identified by the City when a request for service is made.

#### e. Insulation

Windings shall be double-dipped with Class H varnish and baked. Insulation shall be tested phase-to-phase and phase-to-ground at 1000 volts dc and yield a one minute test result of 1000 meg-ohms or better.

#### f. Final Test

A 1000 volt meg-ohm meter shall be used to verify insulation continuity. This reading shall be 100 meg-ohms or greater and documented. After reassembly, motor shall be test-run at full voltage and documentation of current reading and vibration readings shall be provided to the end user. (NOTE: a 5KV meg-ohm meter shall be used on all 4160V motors.) Copper DC resistance tests, phase-to-phase, on rotor winding from slip rings shall be performed. If the rewound rotor fails to pass any test, the rotor shall be rejected. The Contractor shall rebuild and retest until all tests are approved by the City.

# 8. WELL PUMPING REDEVELOPMENT SERVICES

Following mechanical redevelopment, the City may elect to have Contractor proceed with pumping redevelopment which shall consist of intermittent pumping and surging of the well and discharging to waste via permitted storm drain channels. The Contractor shall make adequate provisions for the disposal of water pumped from the well during redevelopment and/or test pumping. Such provisions shall include, but not be limited to, furnishing and installing discharge piping from the pumping unit of sufficient size and length to conduct water to a point as designated by the City and upon request providing temporary storage tanks to contain the discharge.

The Contractor shall also furnish acceptable orifices, meters or other approved devices, which will accurately measure the pumping rate. Upon request, an airline complete with properly calibrated gage shall be provided by the Contractor to measure the elevation of water in the well. Contractor may be required to collect pumped groundwater into sedimentation tanks prior to discharge to a storm drain in order to comply with the waste discharge requirements of the regulating agency(s). Redevelopment records shall be maintained showing production rate, total acre footage discharged, and all other pertinent information concerning well development.

# 9. PRODUCTION TESTING OF REHABILITATED WELLS

Upon request, the Contractor shall provide production testing of rehabilitated and or new wells to determine the optimum rate of pumping and shall include a step drawdown test and a constant-rate discharge test in accordance with AWWA A100-20 standards (latest edition). Prior to the start of the step drawdown test, a period of at least 24 hours of non-pumping conditions shall be met following the pumping development work. The Contractor shall provide qualified personnel during the step-drawdown and constant-rate discharge test and shall ensure proper operation of the pumping test equipment and assist in water level monitoring if requested by the City.

RFP NO.: 21-059

# WATER WELL, PUMP AND MOTOR REHABILITATION AND REPAIR SERVICES

# a. Discharge Water

- 1. Discharge water shall be conveyed from the pump to the point of discharge at the well site. It is imperative to ensure that no damage by flooding or erosion is caused to the chosen drainage structure or water disposal site, or to nearby lands and/or streets.
- 2. The Contractor shall provide all piping and discharge lines. The point of discharge location will be provided by the City and the Contractor will be responsible for all devices and piping to convey the water to that discharge point.
- No fluids will be permitted to flow offsite (except to proper drainage facilities) or to properties not owned by the City. All discharges will meet the requirements of the City's NPDES permits and Orange County Flood Control permits.

# b. Step-Drawdown Test

- 1. Prior to starting the step-drawdown test in the well, the static water level shall be measured. The well shall be "step" tested at rates determined by the City. The step-drawdown test for the well is estimated to require approximately 12 pumping hours with each step being 3 to 4 hours in duration unless specified otherwise.
- 2. The Contractor shall operate the pump and change the discharge as directed by the City. Both a gate valve and an engine throttle shall control the discharge of the pump unless specified otherwise. The discharge shall be controlled and maintained at approximately the desired discharge for each step with an accuracy of plus or minus five (5) percent.
- 3. Pump discharge shall be measured with an instantaneous flow meter dial and a totalizer meter and stopwatch, as approved by the City. Both an air-line and electric sounder shall be furnished by the Contractor for water level measurements. During the step-drawdown test, the Contractor shall record sand content measurements at 30-minute intervals.

# c. Constant Rate Discharge Test

- 1. After a 24-hour recovery period from the end of the step-drawdown test, the City may request the Contractor to perform a constant-rate discharge test. This test shall be run for a period of 24 hours, or until the pumping level remains constant for at least 4 hours, or until the City terminates the test. A recovery period of 24 hours shall follow the termination of the constant-rate discharge test, at which time the City will collect residual drawdown (recovery) data.
- 2. During the constant-rate discharge test, the Contractor shall also conduct the final sand content testing. The sand content shall be determined by averaging the results of samples collected at the following times during the final pumping test:
  - i. Five (5) minutes after start of the test
  - ii. After 1/4 of the total planned test time has elapsed
  - iii. After 1/2 of the time has elapsed
  - iv. After 3/4 of the time has elapsed
  - v. Near the end of the pumping test

#### d. Aborted Tests

- 1. Whenever continuous pumping at a uniform rate has been specified, failure of pumping operations for a period greater than one (1) percent of the elapsed pumping time shall require suspension of the test until the water level in the pumped well has recovered to its original level.
- Recovery shall be considered "complete" after the well has been allowed to rest for a period at least
  equal to the elapsed pumping time of the aborted test, except that if any three (3) successive water
  level measurements spaced at least 20 minutes apart show no further rise in the water level in the
  pumped well, the test may be resumed immediately.
- 3. The City shall be the sole judge as to whether this latter condition exists.

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# WATER WELL, PUMP AND MOTOR REHABILITATION AND REPAIR SERVICES

#### e. Records

- 1. The Contractor shall keep accurate records of the pumping test of the well and furnish copies of all records to the City upon completion of the test. The records shall also be available to the City for inspection at any time during the test. The records shall include physical data describing the construction features such as, but not limited to:
  - i. Well depth and diameter
  - ii. Complete screen description
  - iii. Length and setting
  - iv. A description of the measuring point and its measured height above land surface and/or mean sea level
  - v. The methods used in measuring water levels and pumping rates
- 2. The Contractor shall also keep records on the type of pumping equipment used at the well site including engines, drive components, bowls, lines, and shafts. The Contractor will keep records of operation of equipment during the test including engine rpm and horsepower, fuel use, and other essential information that will be useful in designing a pump system.

#### 10. MACHINE WORK

Upon request, the Contractor shall provide machine work services. Machine work shall apply to, but not be limited to, the drilling and tapping of broken bolts, customized (1) - 2" coupling at the base of the discharge head, the repairing of damaged locking rings and stators, the replacing of power cords, power cord assemblies and power cord connectors and repairs to impellers, covers, volutes, mounting rails, bearing journals, discharge heads, and pump shafts.

#### 11. DOCUMENTATION

All rehabilitations, repairs, and installations shall be supplemented with reports and documentation that provides accurate details about the new installation or repairs (including a pump and motor schematics and pump performance curves). Within ten (10) business days of completing a full rehabilitation, the Contractor shall provide these documents to the City for review. All new pump and motor installations shall come with plaques that maintain up-to-date and accurate information regarding the performance and capacity of the units.

Documentation shall include, but is not limited to, the following:

- a. Pre-Disassembly Testing report for all activities as described.
- b. Photo documentation of existing condition prior to fulfilling each described criteria of the disassembly test.
- c. Motor Disassembly report, including photo documentation before and after cleaning.
- d. Motor Inspection report, including stator core loss testing results. Photo documentation of coils, windings and conductors showing any signs of excessive wear or failure.
- e. Mechanical fit measurements shall be recorded as specified. Photo documentation shall be submitted for all replaced bearings, grease fittings, plugs, etc.
- Rotor balancing report as specified.
- g. Insulation report as specified above. Before and after photo documentation of the windings prior to varnishing and baking.
- h. Final test report as specified.
- i. Pump Reconditioning report as specified.
- j. Pump curve and pump/motor schematic.

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# WATER WELL, PUMP AND MOTOR REHABILITATION AND REPAIR SERVICES

All testing, inspections and incidentals related to required reports shall be considered included within the bid items for said testing report and no additional compensation shall be allowed.

#### 12. MINIMUM QUALIFICATIONS

- a. All electric motor repair shops shall be EASA Accredited and shall provide a copy of the certification upon request by the City. Failure to provide a sub-contractor that is an EASA Accredited Member as a part of the proposal may be grounds for proposal rejection.
- b. Contractor or Contractor's subcontractor shall be certified as an UL Facility and shall provide a copy of the certification upon request by the City.
- c. Contractor shall be responsible for obtaining all original equipment manufacturer (OEM) technical documents, drawings and parts when necessary.
- d. Contractor shall have all engineering, design, metalizing, welding, heat treating, machining, balancing, calibrating and testing capabilities necessary to completely refurbish/rewind electric motors.
- e. Equipment used for inspecting, calibrating and testing pumps and motors shall be up-to-date and have calibration certificates, less than one year old, traceable to National Institute of Standards and Technology (NIST) standards where applicable.

# 13. SECURITY REQUIREMENTS

Public Works Agency field representative will unlock the Public Works Agency facilities entry gates on the first day of work to allow Contractor access. Contractor shall then supply their own padlock(s) for some entry gates as specified by the Public Works Agency. Contractor's padlock(s) shall lock onto the Public Works Agency's padlock connecting to the chain-link, which enables both the Public Works Agency field representative and Contractor to unlock the entry gates. After completion of work, padlock(s) shall be removed by the Contractor.

Contractor and/or subcontractors shall notify the Public Works Agency field representative upon arrival and departure to or from jobsite.

# 14. PARTS, MATERIALS AND WARRANTIES

The Public Works Agency will reimburse the Contractor for the cost of repair parts, materials, and replacement equipment, plus 15 percent markup, provided the Contractor has obtained the City's prior written approval of Contractor's written estimate. All replacement equipment shall be approved by the Public Works Agency prior to the purchasing of the equipment. The Contractor shall provide manufacturer documentation to the Public Works Agency for any replacement equipment. The Contractor shall submit an invoice with attached applicable receipts for a particular job to the Project Manager.

The Contractor shall assure that all materials, parts, and workmanship supplied shall be free from original or developed defects. Contractor shall provide a minimum of one year warranty for materials and parts and thirty days on workmanship. Should original or developed defects and/or failures appear within the minimum warranty of one year after work completion, Contractor shall, at its expense, rectify such defects and/or failures and make all replacements and adjustments that are required.

Corrective work shall be performed by the Contractor and given the highest priority after Public Works Agency's notification to do so, and shall be completed to the satisfaction of the Project Manager. The Contractor shall proceed diligently to complete said work within the time allotted as approved by the Project Manager.

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# WATER WELL, PUMP AND MOTOR REHABILITATION AND REPAIR SERVICES

# 15. AS-NEEDED REPAIRS

At the direction of Project Manager, the Contractor shall provide a written estimate including labor and parts, materials and equipment needed to perform the As-Needed Repairs. Upon written approval from the Project Manager, the Contractor shall perform the As-Needed Repairs.

At its sole and absolute discretion, Public Works Agency reserves the right to accept or reject the quote provided.

# 16. VALUE ADDED SERVICES

The Contractor may propose additional related services that the City has not specifically identified in this RFP to accomplish the stated goals of this RFP. Value added related services will be considered by the City and may or may not be incorporated in the agreement. All parts and materials must be supplied new and factory approved.

Additional work/locations may be added during the Contract period. Upon request by the Project Manager, the Contractor shall provide a written quotation for any additional work/location(s), based on the rates submitted. The Contractor shall be paid for additional work/locations in accordance with the rates submitted. Upon Contract Manager's negotiation and acceptance of the Contractor's written quotation the additional work/location(s) may be added to the Contract by amendment or change order.

# 17. STORAGE FACILITIES

The Public Works Agency will not provide storage facilities for the Contractor. The Public Works Agency will not be liable or responsible for any damage, by whatever means, or for theft of materials or equipment on the jobsite.

#### 18. CLEANING AND RESTORATION OF SITES

The Contractor shall visually inspect the site during and after work is performed for liquid spills, oil and grease deposits, hard water strains, debris, trash, refuse, etc. Upon request, the Contractor shall provide professional cleaning services to remove persistent deposits such as oil and grease stains by means of pressure washing and chemical cleaning with detergents, caustic sodas, etc. that are eco-friendly. The sites shall be cleaned and restored to previous if not better condition after any well rehabilitation work performed that requires dismantling, installing or fabricating.

The Contractor shall be responsible for the following:

# 1. Liquid and oil deposits

The Contractor is responsible during the duration of the job to contain and clean up any types of spills or leaks. This pertains to equipment, vehicles, tools, etc. Spill containment and or absorbent ground tarp is required for equipment stored on site over long periods of time. All containers of fuel, solvents and or chemicals shall be stored on spill containment berms or secondary containment.

# 2. Materials

The Contractor is responsible for the removal of all used materials through the duration and completion of the job, and all debris derived from these services shall be removed from City property. Disposal shall be at the Contractor's expense and that includes but is not limited to debris, trash, refuse, etc.

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# WATER WELL, PUMP AND MOTOR REHABILITATION AND REPAIR SERVICES

# 3. Restrooms

When applicable, the Contractor shall furnish their own restroom facilities and are responsible for said facilities onsite.

# 4. Storm Water Pollution Prevention (SWPP)

The Contractor shall not allow any debris from its operations under this Contract to be deposited in the storm drains and/or gutters in violation of the City's NPDES permit.

#### 5. Site Maintenance

The Contractor shall maintain the site and keep the premises free from accumulation of waste material and the Contractor shall remove all rubbish, implements, surplus material, and temporary facilities generated by the work.

# 6. Cleanup

The Contractor is responsible for leaving the work area free of all debris generated by this work at the end of each workday and for final cleanup when the job is completed.

The City shall perform inspections of the site prior to the work being performed and identify the conditions of concerns if any remain during and after the work is completed.

#### 19. SPECIAL SAFETY REQUIREMENTS

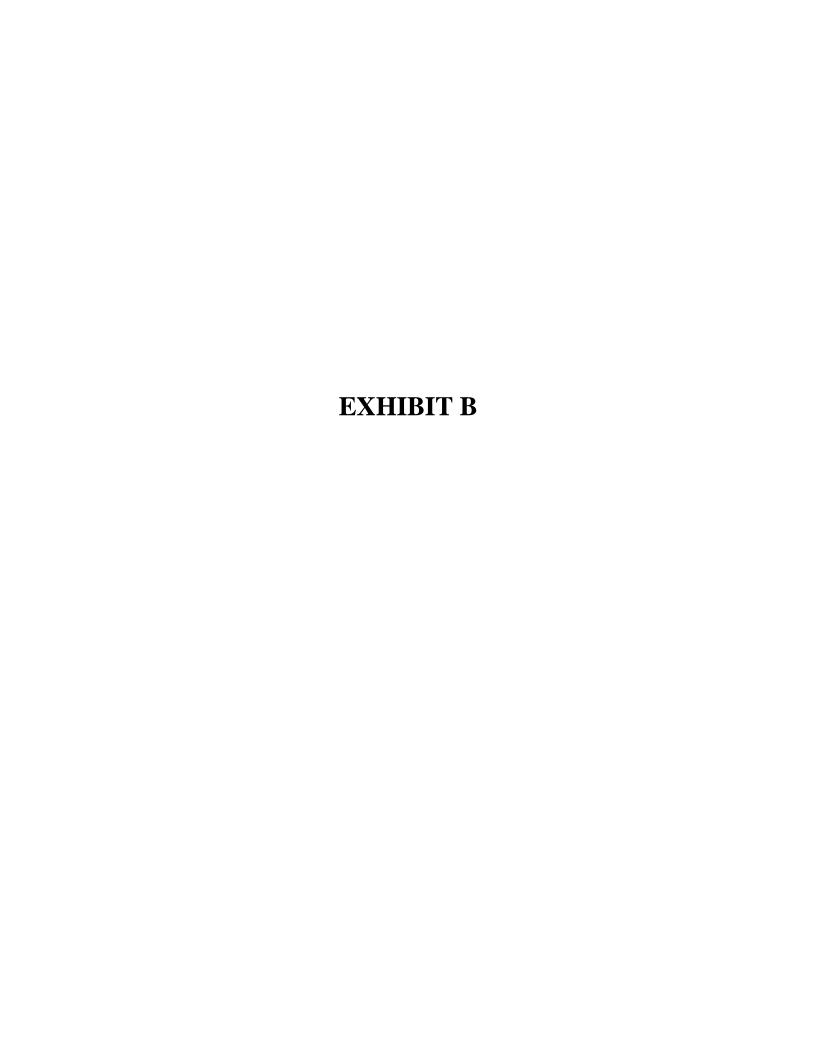
All Contractor's operators shall to observe all applicable State of California Occupational Safety and Health Administration (Cal/OSHA) and Public Works' safety requirements while at Public Works job sites.

# 20. ADDITIONAL RESPONSIBILITIES OF THE CONTRACTOR

Contractor and or Contractor's subcontractors must possess and maintain the following active and valid licenses as applicable to individual subcontractor:

- 1. State of California Water Well Drilling Contractor's C-57 License or Contractor's "A" License.
- 2. State of California Limited Specialty Contractor's C-61, subcategory Machinery and Pump Contractor's D-21 License.
- 3. Have a minimum of five years of experience performing groundwater wells and pump pulling services. If a Subcontractor is used, Subcontractor must also have a minimum of five years of experience performing services as stated above. Also, the Contractor's project manager(s), and Subcontractor's project manager(s), if any, must have a minimum of five years of experience performing groundwater wells, pump pulling services, video inspections and/or motor repairs. In addition, the Contractor's project manager(s) and Subcontractor's project manager(s), if any, must have the following certifications:
  - State of California Division of Occupational Safety and Health Administration Hazardous Waste Operations Emergency Response (HAZWOPER) Certification
  - National Ground Water Association (NGWA) Certification Pump Installation
  - Electrical Apparatus Service Association (EASA) Accredited Member Status

Provide all labor, equipment, materials, tools, and supervision required to perform as-needed pump pulling





159 N. ACACIA STREET \* SAN DIMAS, CA 91773 PHONE: (909) 599-9606 \* FAX: (909) 599-6238

CAMARILLO, CA 93010 \* PHONE: (805) 482-1215 www.genpump.com

**WELL & PUMP SERVICE SINCE 1952** 

Serving Southern California and Central Coast

Lic. #496765

# **Request for Proposal**

# Water Well, Pump and Motor Rehabilitation and Repair Services RFP No.: 21-059

May 27, 2021 @ 3:00 pm

Prepared by

Michael Bodart General Pump Company, Inc.

For The

City of Santa Ana 220 S. Daisy Avenue, Bldg A Santa Ana, CA 92703

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**Team Organization Breakdown** 

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# Section 5- Certifications

Attachment 5

Non-Collusion Affidavit

Non- Lobbying Certification

Non-Discrimination Certification

# Section 1



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CAMARILLO, CA 93010 \* PHONE: (805) 482-1215 www.genpump.com

# **WELL & PUMP SERVICE SINCE 1952**

Serving Southern California and Central Coast

City of Santa Ana 20 Civic Center Plaza Santa Ana, California 92701 May 27, 2021

Lic. #496765

Subject: Cover Letter: Water Well & Pump and Motor Rehabilitation and Repair Services-RFP

General Pump Company, Inc.(GPC) is pleased to provide our proposal for the referenced program. This cover letter is intended to provide a summation of our qualifications and clarifications associated with our proposal and capabilities for this project.

GPC has been in business for 69 years and is specifically located in San Dimas and Camarillo, California. It is now and has always been our business practice to fully comply with all applicable State and Federal Reporting requirements regarding our employee's safety, employment reporting, and customer focus. Note that GPC does not drill wells. We have a number of employees that have significant well drilling experience; however, we decided many years ago to be the premium well and pump maintenance service business and focus 100% of our experience on being the industry leader for well and pump maintenance.

In addition to the minimum requirements of the RFP, GPC maintains the highest Safety Rating for our Industry is the ONLY well and pump service company to be selected by the Oil Refineries based on our Safety Program and Ratings.

GPC has more in-house "Maintenance Contracts" associated with well and pump services than all our competition combined for Southern California. All the Maintenance programs continue to be extended year after year because of our focused performance on efficiency of well and pumps and our in-house knowledge and experience that allows us to design specific rehabilitation or maintenance services based on a variety of conditions that may face specific issues within wells and pumps or controls. We can provide references to these facts if requested.

We have included forms and documents in this proposal that reflect our commitment to be the industry leader related to well and pumps maintenance and service.

Both of our facilities in California have in-house engineering and machining services and GPC manufactures our own pumps and equipment. We are the ONLY pump service company that disassembles all customer pumps and/or all new pumps and inspects 100% of them before they are re-assembled and installed in a system or well. Our Quality Control provides us the ability to correct issues before they are realized in the system.



# Additional Information:

- 1. General Pump Company Inc has been in the water well and pump service business since 1937. GPC incorporated in 1952. Our business focuses on the pump and well maintenance, trouble shooting and engineering pumps. No other Southern California well and pump service company has our manufacturing capabilities which allows us to have a faster response and better quality control.
- 2. Several of our Project Manager also have Engineering Degrees or Professional Geologist Licenses. The Project Engineer assigned to this project would be Mike Bodart who is included in this proposal.
- 3. We have included a copy of our Licenses. Engr A, C-57,D-21, and C-61
- 4. Mark Haas is the project manager for this project & maintains an OSHA and HAZWOPPER certificate of training and copies are provided.
- 5. GPC is following the State of California Cal/OSHA regulations and maintain our Illness Prevention Program

If you have any questions or need additional information, please do not hesitate to contact us.

Thank you and we look forward to continuing working with The City of Santa Ana.

Sincerely,

Michael Bodart

President / Director of Engineering

GENERAL PUMP COMPANY, INC.



# **Scope of Services & Schedule**

General Pump Company operates a *full* machining / manufacturing facility and as mentioned in our Statement of Qualifications - we are the only well and pump service company in Southern California that builds 100% of our bowl assemblies. With our sixteen (16) cranes and/or rigs along with our electrical, mechanical support, and experienced operators, we have the capabilities and expertise to service the City's emergency and normal maintenance. Because of our close proximity and capabilities, we can usually get any emergency repair completed and back in service in one day.

We have more annual (with renewal option) Maintenance Contracts than all of our competitors for the Southern California region. Maintenance Contracts are considered our highest priority when scheduling.

Listed below is an example of our scheduling process for the services stated in the Attachment 1: Scope of Work and upon receiving a Notice-to-Proceed.

•	Day 1	Mobilization; Pull
	Day 2	Prep for video.
•	Day 3	Perform video.
	Day 4	Wire Brush (if needed)
•	Day 5	Chemical treat
	Day 6	Bail; disposal of fill.
•	Day 7	Sonar Jet (recommend performing prior to chemical treat. Performing AirBurst® would be safer and more effective - would take one day)
•	Day 8	Prep for video.
•	Day 9	Revideo
•	Day 10	Clean up site; demobilize.
•	Days 11-15	During this process we will be waiting for materials. Schedule assumes materials will arrive within ten (10) days or less. Allow two (2) days to inspect and assemble (Shop). Including Motor Repair Services
•	Day 16	Install pump.
•	Day 17	Startup and testing.

<sup>\*\*</sup> If you perform the factory bowl testing they are quoting 6-8 weeks\*\*

# Section 2

RFP NO.: 21-059

WATER WELL, PUMP AND MOTOR REHABILITATION AND REPAIR SERVICES

# APPENDIX ATTACHMENT 2: FEE PROPOSAL

**Certification** - I certify that I have read, understand and agree to the terms and conditions of this Request for Proposal. I have examined the **ATTACHMENT 1: SCOPE OF WORK**. I am familiar with all the existing conditions and limitation that may impact work requests. I understand and agree that I am responsible for reporting any errors, omissions or discrepancies to the City for clarification prior to the submission of my proposal.

Proposer shall submit hourly rates schedule, which shall include but not limited to, direct and indirect costs for labor, for staff per job classification, material, equipment rates, overhead, incidental supplies, travel, mileage, and fuel. Any special materials will be purchased by the contractor only after discussed and authorized by the City projects manager or designee in writing.

Prior to commencement of services, Contractor shall provide separate quotes, upon request by the City, which shall be approved by the City's Public Works Water Resources Division.

# **FEE SCHEDULE**

The undersigned declares that he/she has carefully examined the request for proposal, that he/she has examined the Proposed Scope of Services, and hereby proposes to furnish all material and do all the work required to complete the said work in accordance with said Proposed Scope of Services, for the unit price(s) set forth in the following schedule:

Note: This contract is subject to prevailing wages.

TO: CITY COUNCIL OF THE CITY OF SANTA ANA

FROM: General Pump Company, Inc.

#### **MOTOR & PUMP SPECIFICATIONS**

Motor: US M

US Motor 250 HP, 3 PH, 460 VAC, Frame 445TPA WPI

Discharge Head:

12"X12"

**Existing Pump:** 

Goulds Pump, 16DMC, 3 STG, 298' 7" feet overall length, 12-inch diameter, 10-foot

sections

Well Casing:

16-inch casing, 1015 feet deep, refer to Appendices for historical information

Housing:

Concrete housing with hatched roof, refer to appendices for site maps

Location:

921 W Walnut St, Santa Ana CA 92703



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CAMARILLO, CA 93010 · PHONE: (805) 482-1215 www.genpump.com

# **WELL & PUMP SERVICE SINCE 1952**

Serving Southern California and Central Coast

Lic. #496765

# (Effective November 20, 2020)

3-Man Crew & Standard Pump Pulling Rig	\$442.00 per Hour
1 Operator & 40-Ton Crane	\$335.75 per Hour
1-Man Crew, Service Support Rig for the 40-Ton Crane	
2-Man Crew & Combination Rig	
2-Man Crew & Standard Pump Pulling Rig	
Wire Brush or Swab Rental (Nylon Brush NOT included)	
Flatbed Truck & Driver	
Rotary Crane (up to 17-ton) & 1-Man Crew	\$227.80 per Hour
Rotary Crane & 2-Man Crew	
Service Truck & 1 Pump Mechanic, Electrician or General Services	
Service Truck & 1 Pump Mechanic & Helper	
Pipeline Fabricator	
Shop Labor – Pump Mechanic	\$95.20 per Hour
Shop Labor – Machinist or Welder	
Overtime & Saturdays	Add \$49.30 per Man Hour
Sundays & Holidays	Add \$98.60 per Man Hour
Control & Instrument Specialist	
Additional Helper	\$97.75 per Hour
Video Log - Color with Downhole and Side-Scan	
Re-Video Log - Color with Downhole and Side-Scan	
Dynamic Video with Mini Camera	\$1,657.50 per DVD
Test Pump – Above 300-Hp Drive/ Generator	
Test Pump – Below 300-Hp Drive/ Generator	
1-Man Crew & Chemical Distribution Trailer, with Safety Equipment	
Engineering and Hydrogeology Support	Per Job Basis

# RATES <u>DO NOT</u> INCLUDE SECURITY OR PORTA POTTIES

# FIELD RATES ARE PORTAL TO PORTAL

For additional information on *General Pump Company, Inc.*Or to speak with one of our qualified Engineers, please contact us at: <a href="mailto:engineering@genpump.com">engineering@genpump.com</a>

# RFP NO.: 21-059

# WATER WELL, PUMP AND MOTOR REHABILITATION AND REPAIR SERVICES

GENERAL	UNIT	QUANTITY	PRICE	TOTAL
Removal of motor, discharge head & pump <sup>1</sup>	LS	1	13,000	13,000
Installation of motor, discharge head & pump		1	15,000	15,000
New bowls performance certification		1	1,500	1,500
Water well disinfection	EA	1	1,500	1,500
Step drawdown test	EA	1	1,200	1,200
Sound attenuation <sup>5</sup>	LS	1	500	500
PUMP WORK	Philipp		9.55	
New complete pump with 2,800 GPM at 280 feet TH, high efficiency (83.1%) or better <sup>2</sup>		1	10,500	10,500
12-inch 5 feet column & collar	EA	2	560	1,120
12-inch 10-feet column & collar	EA	27	800	21,600
12-inch threaded bronze retainers	EA	28	300	8,400
Rubber line shaft bearings	EA	28	45	1,260
10-foot 1 15/16-inch head shaft		1	1,500	1,500
10-feet 416 SS 1 15/16-inch line shaft & coupling		27	530	14,310
5-foot 416 1 15/16-inch line shaft		2	325	650
1 15/16-inch 416 SS shaft couplings		2	50	100
12-inch 20 feet suction pipe		1	1,300	1,300
SS 12-inch suction cone strainer		1	960	960
300' of SS sounding tube 4		300	2.50	750
Sounding Kit		1	1,000	1,000
MOTOR WORK		A THE SERVICE	The state of	
New complete 250 HP, 460VAC, 3Ph, 60Hz or equal <sup>2</sup>	EA	1	18,200	18,200
Top Bearings	EA	1	Include	Include
Bottom Bearings	EA	1	Include	Include
Two band heaters 115v, 115 Watt	LS	1	Include	Include
Three coil thermostat NC or NO	LS	1	Include	Include
Set of tin plated copper terminals or lugs	LS	1	Include	Include
Tellus 68 oil		1	Include	Include
WELL WORK		- Project		
Mobilization & Demobilization	LS	1	500	500
Under Water video of well (before/after)	EA	2	1,100	2,200

RFP NO.: 21-059

# WATER WELL, PUMP AND MOTOR REHABILITATION AND REPAIR SERVICES

TOTAL	1-2			\$140,750.00
SONAR Jet of perforations (1015 Feet)	LS	1	6,000	6,000
Bail & dispose of all dirt & debris (if needed)	LS	1	2,500	2,500
Chemical treatment during wire brushing (optional) <sup>3</sup>	LS	1	12,000	12,000
Wire brushing of well section under water & perforations (1080 feet)	EA	1	3,200	3,200

Proposed new pump: Make: Hydroflo, Model No.: 14HL , GPM: 2800 , TDH: 280 , Eff.: 82%

- 1. Contractor must include all costs involved in accessing the equipment including removal of pump through the building hatch and or working around building roof and hatch. Please refer to Appendix A for a site map as reference.
- 2. Contractor to provide pump curve, lead time for procurement of parts along with turn around/completion date. 6 weeks based on scope. See pump curve attached
- 3. Chemical treatment during wire brushing will not be used in the evaluation of the bids. If chemical treatment is applied, the bid price must include cost of the chemicals, chemicals handling (application & mixing), used chemicals neutralization and disposal.
- 4. New Stainless Steel line for sounding will be provided and installed, with necessary mounting brackets, and one gauge calibrated for sounding.
- 5. Sound attenuation shall be required for major work. Sound attenuation for engine noise shall be limited to a maximum of 75 dB(A) at 23 feet when operating at full rated load. Sound proofing solution to be approved by the Project Manager.

Contractor shall submit additional labor, material and equipment rates along with fee schedule. Contractor's labor and equipment rate sheet shall list rates for all labor designations, equipment and materials.

DIDDED INFORMATION

Legal Company Name: General Pump Company, Inc.
Complete address: 159 N. Acacia Street, San Dimas, CA 91773
Phone Number:909-599-9606
Email Address: mbodart@genpump.com / aesparza@genpump.com
Authorized Signature:
Name: Michael Bodart
Title: President / Director of Engineering

Company: General Pump Company

Name:

Date: 5/17/2021



Pump:

Size: 14HL (4 stage)

Type: Vertical

Synch Speed: 1800 rpm

Curve: 122211

Specific Speeds:

Dimensions:

Vertical Turbine:

Pump Limits:

Temperature: 140 °F Pressure: 330 psi g

Sphere Size: 1.5 in

Power: 600 hp Eye Area: -

Speed: 1770 rpm

Impeller: 14HL ENCL. SS

Dia: 9.115 in

Suction: 10 in Discharge: 12 in

Bowl Size: 14 in

Max Lateral: 1 in

Thrust K Factor: 17 lbf/ft

Ns: ---

Nss: -

Search Criteria:

Flow: 2800 US gpm

Head: 280 ft

Fluid:

Water Density: 62.32 lb/ft3

Viscosity: 0.9946 cP

NPSHa: —

Temperature: 68 °F

Vapor Pressure: 0.3391 psi a

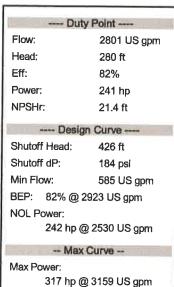
Atm Pressure: 14.7 psi a

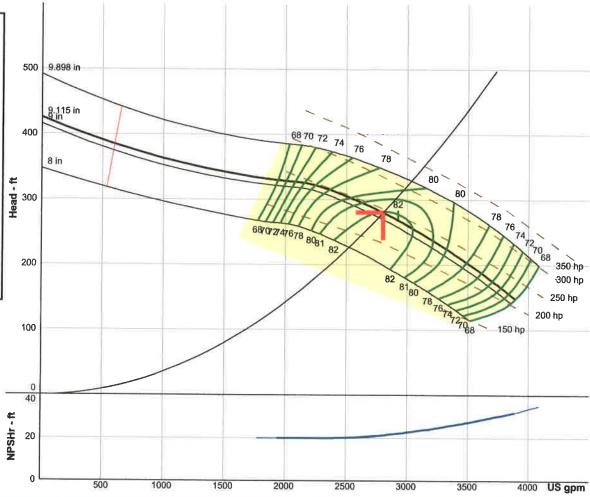
Motor:

Standard: NEMA Enclosure: WP1

Size: 250 hp Speed: 1800 rpm Frame: 447T

Sizing Criteria: Max Power on Design Curve





Performance E	valuation:	- N W - L 2	- V 8 V	N AS II	1.00
<b>Flow</b> US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
3360	1770	220	79.5	234	25.9
2800	1770	280	82	241	21.4
2240	1770	322	75.9	240	20
1680	1770	343	60.7	235	20
1120	1770	370	44.7	231	20

# Section 3

RFP NO.: 21-059

## WATER WELL, PUMP AND MOTOR REHABILITATION AND REPAIR SERVICES

## **APPENDIX**

## **ATTACHMENT 3: PROPOSER'S REFERENCES**

List and describe fully the contracts performed by your firm which demonstrate your ability to provide the supplies, equipment or services included in the scope of the proposal specifications. <u>Attach additional pages if required</u>. The City reserves the right to contact each of the references listed for additional information regarding your firm's qualifications.

Customer Name: Glendora, City of	Contact Individual: Steve Patton
Address: 116 E. Foothill Blvd.	Phone Number: 626-914-8200
Glendora, CA 91740	Facsimile Number: 626-914-8221
Contract Amount:\$ 150,000.00	Year: Current
Description of supplies, equipment, or services prevented & Booster Maintenance - Annual Contra	rovided:
Reference	
Customer Name: Santa Monica, City of	Contact Individual: Gary Richnick
Address: 1228 South Bundy Dr.	Phone Number: 310-458-8411
Los Angeles, CA 90025	Facsimile Number:310 820-3747
Contract Amount: \$ 400,000.00	Year: Current
Contract Amount: \$400,000.00  Description of supplies, equipment, or services pr Well & Booster Maintenance - Annual Contract	Year: Current rovided:
Contract Amount: \$400,000.00  Description of supplies, equipment, or services pr Well & Booster Maintenance - Annual Contract	Year: Current
Contract Amount: \$400,000.00  Description of supplies, equipment, or services pr Well & Booster Maintenance - Annual Contract	Year: Current rovided:
Contract Amount: \$400,000.00  Description of supplies, equipment, or services provell & Booster Maintenance - Annual Contract  Reference  Customer Name: Orange, City of	Year: Current  rovided:  Contact Individual: Sonny Tran  714 299 2407

RFP NO.: 21-059

## WATER WELL, PUMP AND MOTOR REHABILITATION AND REPAIR SERVICES

Reference

Customer Name: Monterey Park, City of	Contact Individual: Ralph Martinez
Address: 2657 N. Delta Ave	Phone Number: <u>626-280-5552</u>
Rosemead, CA 91770	Facsimile Number: 626-572-7342
Contract Amount: <b>\$400,000.00</b>	Year: Current
Description of supplies, equipment, or services p Well & Booster Maintenance - Annual Co	rovided:

THIS FORM MUST BE COMPLETED AND INCLUDED WITH THE PROPOSAL.
PROPOSALS THAT DO NOT CONTAIN THIS FORM WILL BE CONSIDERED NONRESPONSIVE.

# Section 4



# QUALIFICATIONS, EXPERIENCE, AND UNDERSTANDING OF THE PROJECT CAPABILITIES

General Pump Company, Inc. is a Professional Well Redevelopment and Pump Equipment contractor located in San Dimas and Camarillo, California. The Engineering staff, field support and service crews, and office support staff are 100% dedicated to well evaluation and rehabilitation, and pump equipment evaluation and services.

The technical staff at General Pump Company, Inc. has worked in almost every aspect of the well and pump industries. This diverse experience provided us with unique qualifications to serve our customers and provide them with solution-oriented approaches to get their system back into operation. Our engineers and Hydrogeologist have all worked in the drilling and design segment of the water, and/or oil and gas industries, and many of our shop and support technicians have worked for major pump manufactures.

General Pump Company, Inc. employs only experienced Engineers, Hydrogeologist and Technical Field Personnel that can offer Customers assistance in the following areas:

- Assess Well Yields to Minimize Operating and Maintenance Costs
- Determine the Efficiency of Production and ASR Wells and Pumps
- Engineered Pump and Well Equipment
- Pump Facility Design and Construction / Booster Facility Design and Construction
- Pipeline Design and Construction
- Appropriate Mechanical and Chemical Redevelopment
- Periodic Monitor and Maintenance Programs
- Water Quality and Production Solutions / Well System Optimization
- Engineered Pump Suctions
- Pump and Motor Repair / Custom Pump Design and Machining
- Electrical, SCADA and Transducer Support
- Casing Repair and Swedging
- Video and Geophysical Logging Support

General Pump Company, Inc., an Engineering Service Company, is dedicated to supporting the ongoing needs of the Water Industry, and committed to providing:

- Solution-oriented engineering using problem-solving techniques by degreed Engineers with diverse well system and groundwater experience, and pump application engineers from major pump manufacturing companies.
- Full-time machine shop, staffed with experienced personnel capable of building and repairing standard and custom pump equipment and specialty products.
- Self-contained chemical trailers to include safety support and operational controls.
- Trained and certified operators for periodic monitoring and maintenance programs.
- In-house training facility and training programs for customers and our own personnel.
- Strong project and construction management for any size project.
- Instant communications with cellular radio/phones for all staff, engineering, technical, field and shop personnel, resulting in better services at a reduced risk and overall cost.
- Modern, safe and reliable equipment with the <u>Only</u> Telescoping Well Rigs with Spudders in the industry which are required for effective redevelopment of wells in pump houses.



#### **SAFETY**

Safety is paramount when men and equipment are involved. A good safety record is important along with adequate insurance and bonding. General Pump Company, Inc. has the best safety record in Southern California for the water well and pump rehabilitation business. Over the past years, General Pump Company, Inc. has had minimal loss of time for work related injuries

#### **ANNUAL CONTRACTS**

Award of an Annual Contract is a great honor and to have an Annual Contract renewed year after year is the greatest complement to a service company. It proves that the contractor has met or exceeded the customers' set goals and expectations. General Pump Company, Inc. has been selected by over 45 cities in Southern California to maintain their well and pumping systems. We have more Annual Contracts with cities than all our competitors combined. Additionally, General Pump Company, Inc. is the primary contractor or sole-source contractor for 15 private utilities and water districts. Most of these are multi-year contracts having been renewed several times over.

#### MACHINE SHOP CAPABILITIES

General Pump Company, Inc. is the only well and pump Service Company in Southern California that builds 100% of our bowl assemblies. This level of expertise, along with our in-house machining, allows us to supply or repair with a greater level of knowledge that your pump equipment will be reliable and efficient.

Our repair and fabrication facility maintains the most complete line of lathes, welding and associated machining tools.

General Pump Company, Inc. has an expansive repair and fabrication facility. This facility has proven to be invaluable during our 69 years of business, since many pump and motor repairs require a strong interface between machining, welding and electrical support in order to be completed. We have three major groups within our repair and fabrication facility that allow us to serve your needs in a variety of ways:

• Fabrication and Machining: Including lathes, milling machines, grinders, balancing machines, flame welding, gas and electric welding, heli-arc, etc. We perform welding on steel, aluminum, brass, cast iron, resurfacing, and custom work.

We repair all types of pumps by all manufacturers in our facility up to approximately 24-inch impeller diameter for single and multi-stage Horizontal Pumps and 30-inch diameter for Vertical Turbine Pumps.

- Assembly: In general, the pumps we supply are designed and manufactured by General Pump Company at one of our Engineering Service Centers. Assembly of pumps assures the highest quality product, with the assurance that it is built correctly and will meet the design criteria specified.
- **Field Services:** This service has helped us establish ourselves as well and pump problem solvers since many operational problems can be traced to poor installation practices. Having the proper diagnostic equipment and knowing how to use it distinguishes us as "The Leader in Well and Pump Services".



#### MACHINE SHOP CAPABILITIES (Continued)

<u>Precision Alignment</u> - We've invested in the latest Precision Alignment technology and have established a growing list of customers who use us for these services.

**Removal, Installation, Mechanical and Startup** - We perform field-testing, removal, installation and machining services to offer a turnkey pump service.

General Pump Company, Inc. can provide you with high quality workmanship to meet your water supply needs. Our highly skilled employees can also perform repairs on many types of well and booster pumps.

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Pum	n Ke	ngir
T MIII	7.00	PAIL

**Machine Shop** 

Booster

Shaft Manufactured:

Pumps & Motors, Precision

**End Suction** 

Straightening, Electrical Motors

Horizontal Split Case Vertical Turbine

Sleeves Made:

Bronze, Mild Steel, Stainless

Right-Angle Drive

Threads and Tapping

Impeller Rebuilding

**Mechanical Seals** 

**Electric Motors** 

Steel

Balancing, Trimmed Eyes & Flanges

Re-Machine Seat, High Pressure, High New & Overhauled, Rewound, Balanced, Custom Bases, Shaft Repaired Upgrades

High Temperature

## EQUIPMENT AND FIELD SERVICE

General Pump Company, Inc. maintains a full service machine shop, clean and safe rigs and cranes are a minimum requirement for reliability, quality workmanship and safety.

General Pump Company, Inc. has several trucks fully loaded with essential equipment to handle many urgent repairs in the field. Our well and pump service crews are always ready and willing to assist your Water Utility with making a repair to keep your well and booster facilities running. Just let us know and we will be on the way, ready to provide you with the highest quality service available.

General Pump Company, Inc. has the newest fleet of rigs and equipment in Southern California. Maintenance and repairs are made at our San Dimas and Camarillo Facilities to make sure our field operations can safely and efficiently respond to our customer's needs. Below are the benefits to our customers.

- Reliable work In water emergencies, it is important that this large equipment is ready to respond without breakdowns.
- Safety Our new equipment is not likely to malfunction resulting in major damage or possible injuries.
- The most up-to-date equipment to assemble the Customers' pumps.

General Pump Company, Inc. has the only telescoping pump rigs in Southern California.



General Pump Company, Inc. has chemical treatment equipment with fully operational safety equipment that includes eyewash and shower, along with other special redevelopment tools, which allow General Pump Company, Inc. to perform the most cost-effective cleaning to your wells.



#### **KEY PERSONNEL**

### **KEY PERSONNEL**

## MICHAEL G. BODART, PRESIDENT / DIRECTOR OF ENGINEERING

Academic University of Missouri - Bachelor of Science in Civil Engineering

Background Post Graduate C.E. Courses in Geohydrology, University of Southern California

Certifications 1999-Byron Jackson Training Certificate

1998-Grade 1 & 2 Distribution and Treatment Certificates

1998-Engineering "A" License 1995-Dale Carnegie Course

1995-Mackay Pump Rehabilitation Certificate

1992-Golden State Pump Technical Training Certificate

1990-Completed Graduate C.E. Courses in Geohydrology at U.S.C.

1986-Layne & Bowler Pump School Certification

1986-Baroid 1-week Drilling Fluid Technology Course Certification 1985-National Water Works Correspondence Course Certification

Professional

General Pump Company, Inc. - President / Director of Engineering - 1993-

Present

Experience <u>Layne Western</u> - Regional Engineering and Sales Manager (4 offices)

Federal Highway Administration - Civil Engineer

**Professional** 

Presentations Michael G. Bodart (Mike Bodart) is recognized as an expert in the field of pump

engineering and well rehabilitation in southern California. He has been invited to speak for numerous professional water related associations and conventions. Has been speaking professionally for more than 34 years and has presented in nationally known associations such as AWWA, Tri-State, Southern California Water Utility Association, Inland Water Works Association, Groundwater Resources Association and Central Coast Water Association. In 1992, Mike was part of a selected six-person panel of engineers who met in Kansas City to assist

in training nationwide engineers in the water well pump business.

## THOMAS A. NANCHY, SR. PROJECT MANAGER / PROJECT ENGINEER

2004-Byron Jackson Training Certificate

1989-Dale Carnegie Course

1992-Golden State Pump Technical Training Certificate

1986-Layne & Bowler Pump School Certification

1994-Baroid 1-week Drilling Fluid Technology Course Certification 1998-National Water Works Correspondence Course Certification

1994-Goulds Pump Course 2020-BNSF Safety Course

Professional Experience

Tom Nanchy, Sr. Project Manager, has been in the well and pump industry for over Forty (40) years. Throughout his professional career, he has been involved with hundreds of well rehabilitations and is highly regarded in the industry. His wide range of experience allows him to solve many difficult well and pump



issues and provide options. He has also spoken at many professional organizations throughout California with regards to well maintenance and well rehabilitations. Tom is AWWA certified pump installer and a certified pump installer for Large Water Systems (NGWA). He is factory trained and certified by Byron Jackson and Cla-Valve. Tom also holds a certificate with the Mine Safety and Health Administration (MSHA).

## WALTER "RAY" REECE JR. BSBM-BSBA, GENERAL MANAGER

# Professional Experience

Combined over 40 years of experience managing businesses providing well rehabilitation, maintenance, well drilling, coring, pump manufacturing, and investigative drilling in the environmental, mining, energy and water resource industries. Earned two Bachelor of Science degrees in Business Administration and Management including a Finance focus. Identified, developed and negotiated contracts with private, public and governmental agencies to safely and successfully provide well rehabilitation technologies, pump and motor maintenance, drilling and construction services for a variety of applications. Ray has devoted time to technological transfers of information by conducting industry related seminars and guest lecturing at High Schools, Colleges, Universities, SME, AWWA, and the California Nevada American Water Works Association (Cal-NV AWWA).

#### FERNANDO MUNOZ. OPERATIONS MANAGER

#### **Professional**

Experience

Over 40 years' experience of quality control to ensure pumps are ready for installation, scheduling and management of shop and field production crews, and day-to-day management of those Company areas.

Certifications

Grade 2 - Distribution Certificate
Grade 2 - Water Treatment Operator

## JAMES M. HINSON, SR. APPLICATION ENGINEER

#### **Professional**

**Experience** 

Over 40 years' experience of pump engineering. Conducts systems analyses, defines new and/or replacement hydraulic requirements, designs to procurement of materials.

#### LUIS A. BUSSO, P.G., SR. PROJECT GEOLOGIST

## Professional

Experience

Professional groundwater work for the past 14 years encompassing field monitoring and technical report writing for siting, geologic log analysis, design, construction, pump testing, water quality sampling, and rehabilitation of municipal-supply and irrigation-supply water wells. Combining geological and industry knowledge toward well project developments on behalf of water districts, cities, farmers, and other private owners within Central and Southern



California. He currently works alongside Ray Reece, at General Pump Company's Camarillo facility to design and implement pump and well solutions for the clients in the greater Santa Barbara and Ventura Counties.

Academic

**Background** University of California Santa Barbara – Bachelor of Science in Geologic Studies

#### MARK HAAS, PROJECT MANAGER

## Professional

**Background** 

Professional background includes 18 years' experience within the well and pump industry. His experience includes Field Service Technician, AirBurst® Operations to include R & D for Frazier Industries and Bolt, Technologies for air gun operations and functionality and Certified Crane Operator.

#### MICHAEL R. GARCIA, PROJECT ENGINEER

## Professional

**Background** 

Work alongside Project Manager to ensure progression and completion of pump projects. Review project specifications and prepare documents for engineered projects including as-built drawings and field crew instructions. Assist in project coordination and communication between field crews, vendors, and customers.

Academic

Background

Loyola Marymount University, Los Angeles-Master of Science in Mechanical

University of Redlands, Redlands - Bachelor of Science in Physics

#### DANIEL J. PICHARDO, PROJECT ENGINEER

#### **Professional**

**Background** 

Coordinate with project managers, operations manager, and senior applications engineer for materials procurement for all existing projects. Communicate with vendors and customers for timely delivery. Maintain safety manuals for continued safety compliance.

Academic

Background

Seattle University - Bachelor of Science, Civil Engineering, Mathematics Minor

### J. ALFREDO ("FREDDY") RAMIREZ, PROJECT MANAGER

## Professional

Background

Professional background includes 23 years' experience within the well and pump industry. His experience includes designing complete pump assemblies, performing well rehabs, well destructions as well as welding. His wide range of experience allows him to have knowledge in multiple fields in the industry.



## **TEAM ORGANIZATION**

<u>Step 1</u>: Calls for service are taken by one of our engineers. This step is important and based on the issue may require further field inspections, testing, evaluation of data (City and GPC), and a meeting with one of our experienced engineers.

Based on our evaluation, we will submit options for the City to consider. Each option requires a discussion of *Risk*, *Benefit*, *and Cost*. As more information and test data becomes available, the course of action may change. Each change requires GPC's engineers to reevaluate and discuss options.

President/Director of Engineering (35 plus years' experience): General oversight of all GPC projects and project management team, and engineering.

Project Managers / Engineers (30-40 years' experience) (Outside): Meet with customers, prepare solutions and options, and evaluate system problems along with pump and well problems.

Project Managers / Engineers (10-25 years of experience) (Inside): Answer customer's technical questions, perform engineering, support outside project managers / engineers, and work closely with our field foremen, job plans and schedules.

Operation Manager (40 years of experience): General oversight of field and shop operations; includes quality control, technical assistance, and equipment allocations for projects.

Senior Pump Engineer (40 years of experience): Performs detailed engineering evaluations, pump inspections, and submits recommendations to project managers / engineers.

Professional Geologist (14 years of experience): Reviews well rehabilitation processes, down hole testing, and submits recommendations.

Field Technicians, Foremen, Electricians, Certified Welders, Certified Crane Operators, and 40-hour HAZMAT certified (10-30 years experience): Play an important role in the job planning, inspections, quality control, and solutions to the issues being discussed.

General Pump Company acquires only professional and experienced personnel to service our customers.



159 N. ACACIA STREET \* SAN DIMAS, CA 91773 PHONE: (909) 599-9606 \* FAX: (909) 599-6238

CAMARILLO, CA 93010 \* PHONE: (805) 482-1215 www.genpump.com

## **WELL & PUMP SERVICE SINCE 1952**

Serving Southern California and Central Coast

Lic. #496765

## **Well Preventative Maintenance Contracts**

Client References	<u>Project</u>	Work Description	Period	Project Funding per Year
City of Arcadia 240 W. Huntington Drive Arcadia, CA 91066 Contact: Tom Tait Ofc: 626-256-6554	Well & Booster Preventative Maintenance	Well & Booster Preventative Maintenance	Current	\$150,000.00
City of Glendora 116 E. Foothill Blvd. Glendora, CA 91740 Contact: Steve Patton Ofc: 626-914-8200	Well & Booster Maintenance	Well & Booster Preventative Maintenance	Current	\$200,000.00
City of Santa Monica 1228 South Bundy Drive Los Angeles, CA 90025 Contact: Gary Rickinick Ofc: 310-458-8411	Water Well & Pump Maintenance	Water Well & Pump Maintenance	Current	\$400,000.00
City of Orange 189 South Water Street Orange, CA 92866 Contact: Son Tran Ofc: 714-288-2497	Well Maintenance and Repairs	Well Maintenance and Repairs	Current	\$400,000.00
City of Monterey Park 2657 N. Delta Avenue Rosemead, CA 91770 Contact: Ralph Martinez Ofc: 626-280-5552	Well & Booster Maintenance	Well & Booster Preventative Maintenance	Current	\$400,000.00
		p Company has over 45 Annua ore than all our competitors co		tracts in Southern

(Rev. October 2018) Department of the Treasury

# Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

Interna	Revenue Service Go to www.irs.gov/FormW9 for in:	structions and the late	st informa	tion.						
	1 Name (as shown on your income tax return). Name is required on this line,	do not leave this line blank.								
	General Pump Company, Inc.									
	2 Business name/disregarded entity name, if different from above									
e. ns on page 3,	3 Check appropriate box for federal tax classification of the person whose na following seven boxes.  ☐ Individual/sole proprietor or ☐ C Corporation ☑ S Corporation single-member LLC		eck only <b>one</b>		certai instru	emptions in entitie actions o pt payes	s, not n pag	individ e 3):		
Print or type. See Specific Instructions on	Limited liability company. Enter the tax classification (C=C corporation, sometimes). Note: Check the appropriate box in the line above for the tax classification. LLC if the LLC is classified as a single-member LLC that is disregarded another LLC that is not disregarded from the owner for U.S. federal tax is disregarded from the owner for U.S. federal tax is disregarded from the owner should check the appropriate box for the	ion of the single-member ov from the owner unless the c purposes. Otherwise, a sing	wner. Do no owner of the gle-member	LLC is		ption fro	om FA	TCA re	portin	ng
ec.	☐ Other (see instructions) ▶				(Applies	to account	's mainta	iined outs	ide the	U.S)
S	5 Address (number, street, and apt. or suite no.) See instructions.	11	Requester'	s name a	and add	dress (or	otional	)		
See	159 N Acacia St									
٥٥	6 City, state, and ZIP code									
	San Dimas, CA 91773									
	7 List account number(s) here (optional)									
Par	Townsyou Identification Number (TIM)									
	11.00			a otal o i a						
backu	your TIN in the appropriate box. The TIN provided must match the na ip withholding. For individuals, this is generally your social security nu	me given on line 1 to av	oid S	ocial sec	unty n	number	7 1		1	
reside	ent alien, sole proprietor, or disregarded entity, see the instructions for	Part I, later. For other	or a		-		-			
	s, it is your employer identification number (EIN). If you do not have a	number, see How to ge	ta 🗀							
TIN, la										-
Note:	If the account is in more than one name, see the instructions for line er To Give the Requester for guidelines on whose number to enter.	1. Also see What Name	and E	mployer	identii	lication	numb	er		
rvamo	or to dive the ricquester for guidelines on whose number to enter.		9	5	_ 3	5 5	1	8	9 6	
Par	t II Certification							_	_	+
Under	penalties of perjury, I certify that:									
2. I an Ser	number shown on this form is my correct taxpayer identification num n not subject to backup withholding because: (a) I am exempt from ba vice (IRS) that I am subject to backup withholding as a result of a failu longer subject to backup withholding; and	ackup withholding, or (b)	I have not	been n	otified	by the	Inter	nal Re ed me	evenu that	ле I am
3. I an	n a U.S. citizen or other U.S. person (defined below); and									
4. The	FATCA code(s) entered on this form (if any) indicating that I am exem	npt from FATCA reportin	g is correc	t.						
you ha acquis	cation instructions. You must cross out item 2 above if you have been rave failed to report all interest and dividends on your tax return. For real exition or abandonment of secured property, cancellation of debt, contribution interest and dividends, you are not required to sign the certification,	state transactions, item 2 tions to an individual retir	does not a ement arra	ipply. Fo	r mort t (IRA),	gage in and ge	teresi enerali	t paid, Iv. pav	ment	ts
Sign Here			Date ► 01	26/202	1					
Ger	neral Instructions	<ul> <li>Form 1099-DIV (dir funds)</li> </ul>	vidends, in	cluding	those	from s	tocks	or m	utual	
Section noted.	on references are to the Internal Revenue Code unless otherwise	<ul> <li>Form 1099-MISC ( proceeds)</li> </ul>	various typ	es of in	come	, prizes	, awa	ırds, o	r gro	ss
related	d to Form W-9 and its instructions, such as legislation enacted	Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)								
after they were published, go to www.irs.gov/FormW9.		Form 1099-S (proceeds from real estate transactions)								
Pur	pose of Form	• Form 1099-K (mer						ransac	tions	s)
inform	ividual or entity (Form W-9 requester) who is required to file an ation return with the IRS must obtain your correct taxpayer	<ul> <li>Form 1098 (home 1098-T (tuition)</li> </ul>	mortgage i	nterest)	, 1098	3-E (stu	dent	loan ir	iteres	st),
Identif	ication number (TIN) which may be your social security number individual taxpayer identification number (ITIN), adoption	<ul> <li>Form 1099-C (can</li> </ul>	celed debt	)						
taxpa	reridentification number (ATIN), or employer identification number	<ul> <li>Form 1099-A (acqu</li> </ul>	uisition or a	bandon	ment o	of secu	red p	ropert	y)	
(EIN), 1 amour	to report on an information return the amount paid to you, or other nt reportable on an information return. Examples of information	Use Form W-9 on alien), to provide you			perso	n (inclu	uding	a resi	dent	
returns	s include, but are not limited to, the following.	If you do not retur	n Form W-	9 to the	reque	ester wi	th a 1	TIN, yo	u mi	ght

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding,

• Form 1099-INT (interest earned or paid)



CONTRACTORS STATE LICENSE BOARD ACTIVE LICENSE



496765

ETIN CORP

BUSINESS NAME GENERAL PUMP COMPANY INC

Dassefroation(s) C57 C61/D21 A

Experimentum 08/31/2022

www.cslb.ca.gov







# APPLICATION FOR PUBLIC WORKS CONTRACTOR REGISTRATION

## **Registration Information**

Type: Renewal

Period: July 1, 2019 - June 30, 2022

## **Contractor Information**

Contractor Name: GENERAL PUMP COMPANY, INC.

Trade Name:

License Type Number: 1000002769

## Contractor Physical Address

Physical Business Country: United States of America

Physical Business Address: 159 N. ACACIA ST.

Physical Business City/ Province: SAN DIMAS

Physical Business State: CA

Physical Business Postal Code: 91773

## **Contractor Mailing Address**

Mailing Business Country:

Mailing Business Address:

Mailing Business City/ Province:

Mailing Business State:

Mailing Business Postal Code:

## **Contact Info**

Daytime Phone:

Mobile Phone:

Daytime Phone Ext.:

Business Email: gcampbell@genpump.com

Applicant's Email: asantacruz@genpump.com

## Workers' Compensation

## **Professional Employer Organization (PEO)**

Do you lease employees through Professional Employer Organization? No

#### **Workers' Compensation Overview**

Insured by carrier

Carrier: TRAVELERS PROPERTY

**CASUALTY INSURANCE** 

**COMPANY** 

Policyholder Name: GENERAL PUMP COMPANY,

INC

Expiration Date: May 30, 2018

Inception Date: June 1, 2017

Policy Number: PJUB-5946N79-9-16

## Certification

Yes I certify that I do not have any delinquent liability to an employee or the state for any assessment of back wages or related damages, interest, fines, or penalties pursuant to any final judgment, order, or determination by a court or any federal, state, or local administrative agency, including a confirmed arbitration award

Yes I certify that the contractor is not currently debarred under Section 1777.1 or under any other federal or state law providing for the debarment of contractors from public works.

Yes I certify that one of the following is true: (1) I am licensed by the Contractors State License Board (CSLB) in accordance with Chapter 9 (commencing with Section 7000) of the Business and Professions Code; or (2) my business or trade is not subject to licensing by the CSLB.

I understand refunds are not authorized

I, Allison Santa Cruz, the undersigned, am, GENERAL PUMP COMPANY, INC. with the authority to act for and on behalf of the above named contractor. I certify under penalty of perjury that all of the above information provided is true and correct. I further acknowledge that any untruthful information provided in this application could result in the certification being canceled.

I certify this on: 5/24/2019 8:51:18 AM

## **Legal Entity Information**

**Legal Entity Type: Corporation** 

Name: GENERAL PUMP COMPANY, INC.

Registration Services:: Page 2 of 2



Water Well Solutions proudly represents "AirBurst\* Technology" as an innovative water well rehabilitation technology. AirBurst\* is a proven, comprehensive rehabilitation and development process for all types of water wells.

Water Well Solutions continues to be a leader in the well rehabilitation field. As an original AirBurst<sup>a</sup> licensee, we assisted in the initial development of the process, and continue to pursue innovative ways to enhance the technology. Our cutting edge approach has provided our clients with hundreds of successful applications (references available upon request).

Water Well Solutions is the authorized dealer for AirBurst<sup>8</sup> throughout the Midwest.

Water Well Solutions Illinois Division, LLC. 44W158 Keslinger Rd. Elburn, IL 60119 888-769-9009 • Fax 920-474-4771

Water Well Solutions Service Group, Inc. N87 W36051 Mapleton St. Oconomowoc, WI 53066 888-769-9009 • Fax 920-474-4771 www.WWSSG.com E-mail: info@WWSSG.com



## **BI-PRODUCT - RESIDUALS - EXPLOSIVES FREE**

# **AIRBURST®**

Technology

Your Exclusive and Only Licensed *AIRBURST*® Provider in Wisconsin and Northern Illinois!

The Powerful Rehabilitation and Development Process for all Water Well Types.









Compressed air or inert gas are the sources of AIRBURST\* energy, providing an effective and responsible green alternative to other methods.

# MORE BANG FOR YOUR BUCK!



AirBurst is an All-American based technology and is a one of a kind patented process that uses high pressure air or inert gas to stimulate selected zones within the formation and generates high-energy pressure pulses in the well. This energy generates acoustic waves that break up and remove mineral scales, silts, sedimentation and bio-films from the bore hole wall or well screen. With the energy being released at 15/1000 of a second after firing, it generates an air bubble that expands and collapses inside the well. This provides a intense surging action that generates a mechanical cleaning of the well as the bubble expands and collapses. As the bubble collapse, it creates a negative pressure zone in the well that pulls in mineral and biological debris dislodged during the process for easy removal with a bailer.

## AIRBURST® Advantages

A single AirBurst® air gun has numerous interchangeable firing chambers to assure you of a tailored fit in any well of any construction. We have 7 different air guns and 22 chambers available.

ONLY AirBurst® electronically and precisely controls the air gun energy discharge to allow dislodged debris to settle before the next burst occurs. Electronic firing puts the energy control in the hands of our technician. Only AirBurst® can deliver the exact number of bursts per foot at the desired pressure and at the exact location within the well.

AirBurst® gun ports are also designed to provide maximum energy release by maximizing port area and internal throat size to the ports. The energy range we have available is 2 grains of TNT to 910 grains (2 pounds). We have the right tools for the smallest and most fragile well to the big tools needed to develop rock wall wells. Precise pressure regulation allows the AirBurst® process to develop sustainable, controlled and exactly repeatable energy discharges to create a constant energy level to be maintained as the air gun is raised in the well and the hydrostatic pressure decreases. No guess work with AirBurst®.

## No One Compares to the Power of AirBurst®:

5500LL	2800LL	1900LL&B	1500C
1 – 40	20 – 120	20 – 200	500
2,500	2,500	3,000	3,000
Operator Controlled	Operator Controlled	Operator Controlled	Operator Controlled
27 grams TNT	68 grams TNT	109 grams TNT	273 grams TNT
	1 – 40 2,500 Operator Controlled	1 – 40 20 – 120 2,500 2,500  Operator Controlled Operator Controlled	1 - 40         20 - 120         20 - 200           2,500         2,500         3,000           Operator Controlled         Operator Controlled         Operator Controlled

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Water Well Solutions





To whom it may concern:

It is our understanding that the process known as BoreBlast/Air Shock is being considered as an equal to AirBurst for bidding purposes. We have experienced this very general comparison in the past and have clearly defined that while they both emit a seismic wave in the well, but that is truly the end of the comparison. Attached please find a detailed comparison of the two processes. Upon review, it will become evident that the control of the AirBurst process, energy, flexibility and the probability of success due to these advantages, will show that BoreBlast is not actually equal to AirBurst Technology.

The cost to perform the uncontrolled rapid energy release BoreBlast treatment is much lower which gives that contractor an unfair advantage in a bid.

If you have any questions, please feel free to contact me, I am the inventor of AirBurst Technology.

Yours truly,

AirBurst Technology, LLC
Walken C. Szyii

William C. Frazier

E-mail: bill@airbursttechnology.com

W188 S7618 Oak Grove Drive Muskego, WI 53150-9208

Phone: 262-679-3903 cell: 414-719-1526 www.airbursttechnology.com.

Technology, LLC
Well Development

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E-mail: bill@airbursttechnology.com

# **Process and Equipment Comparisons**

August 17, 2018

- 1. AirBurst® equipment is manufactured and supported by a USA company, parts are available in Texas, USA. The Air-Shock equipment is Israeli, (also known as BoreBlast II)
- 2. The first use of the AirBurst process was February of 1995, Air-Shock was first used in the USA in approximately 2003.
- 3. The AirBurst air gun is easily repairable in the field without the use of exotic tools; repair parts are readily available in the USA.
- 4. Patented air guns used in the AirBurst process are manufactured by a USA company, Teledyne Marine Corporation that has over 50 years of experience and owns numerous related patents. The air guns are specifically designed for hostile environment use in water wells and were never designed to clean silos.
- 5. Several Bolt air guns are capable of continuous operation up to 3000 psi. AirBurst air gun discharge ports are configured to produce a single bubble for efficient mass displacement of the water produced by the expanding bubble; it is not just a narrow slot and jetting action as depicted by the Air-Shock literature. Creation of the bubble and subsequent collapse creates a negative pressure which withdraws dislodged material through the screen or out of a rock fracture.
- 6. The timing between energy discharges is critical as energy bursts too close together do not allow for dislodged debris to settle before the succeeding burst occurs. AirBurst is the only process that can electronically regulate the timing and allow the debris to exit the path of the next energy discharge, thereby reducing the amount of debris that is pushed back into the formation.
- 7. The Bolt air gun is operated by a solenoid valve integral with the air gun which allows complete surface control of the down hole energy discharge from the air gun and critical shuttle opening and closing timing which is of paramount importance especially at great depths and in extremely abrasive environments. The Air-Shock device has no such control and is operated by a preset pressure adjustment made prior to lowering the device into the well. When the preset pressure is reached the air gun fires, the unchecked timing results in a very rapid energy release every one half to three seconds and is controlled by internally changing an orifice. Air-Shock has no shuttle timing control and requires removal from the well to make pressure adjustments, resulting in a lot of wasted time.
- 8. The discharge ports of the Bolt Deep Hole Service air gun are closed at all times except for the actual energy discharge. This keeps abrasive well debris out of the shuttle opening, which enhances dependability and greatly extends operational life of the air gun.

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- 9. The AirBurst air gun has firing chambers available from 1 cubic inch up to 500 cubic inches and six different sized air guns for broad application coverage. The 500 cubic inch chamber has the energy potential, in terms of foot-pounds, roughly equivalent to 0,6 pounds (273 grams) of dynamite. The smaller AirBurst air guns can easily and confidently rehabilitate screened sand and gravel wells and even delicate Schedule 80 PVC well screens. According to current Air-Shock literature the largest chamber available is 262 cubic inches with limited port area thereby reducing discharge energy to only 34.6 grams of dynamite at 3000 psi without any hydrostatic pressure. AirBurst air guns have port areas larger than throat areas in air gun so that there is minimal restriction to the energy discharge. AirBurst air guns have many different sized air storage chambers for each air gun, the bottom chambers can simply be interchanged within minutes, when more or less energy is required, Air-Shock must exchange the entire gun for another unit. The energy available from a Bolt air gun with a given chamber size and pressure vs the Air-Shock gun is 3 to 8 times greater than Air-Shock, yet the AirBurst energy is adjustable to low enough to address PVC well screens. Air-Shock's energy claim is at 3000 psi without any hydrostatic pressure, the Bolt air gun energy is at a depth of 30 feet, an extremely significant factor in favor of the Bolt air gun energy, which would be even greater if calculated without hydrostatic pressure.
- 10. AirBurst has specifically manufactured pneumatic control panels to facilitate safe and accurate pressure operation of the air gun. AirBurst typically uses compressed air or can use nitrogen as the energy source for the air gun; the air is not used to penetrate the screen and/or geological formation. The AirBurst can be provide mathematical calculation in Excel format, to determine bubble size so that the gas does not penetrate the screen; other companies use random pressure and air gun sizes.
- 11. AirBurst routinely uses the infinite and efficient supply of compressed air from high pressure and low volume air compressors; a constant pressure is maintained throughout the project, unlike depleting nitrogen cylinders. AirBurst can also efficiently use compressed gas such as nitrogen if specified. However, it is important to note that the air produced by all compressors is 78% nitrogen, so the use of nitrogen gas is of little benefit. AirBurst equipment is trailer mounted and is totally self-contained, there is no waiting for gas suppliers to deliver nitrogen, which can be a major issue if additional gas is need for a big project, there is no additional expense for more compressed air and no waiting. The electronic air gun shuttle timing assures the most efficient use of the gas, where Air-Shock has no control of the efficiency nor does Air-Shock normally offer an air compressor option, it must rely upon delivery of nitrogen to each project location by the nitrogen supplier.
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- 13. AirBurst does not use packers or surge block plates, which can trap air/gas and force air into the well formation
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- 15. In the near future, AirBurst can be used with the very latest patented system (SmartBurst<sub>M</sub>) for monitoring the change in well permeability resulting from the use of an electronically controlled Bolt air gun in a well, the system indicates when an area within the well structure is fully developed. Air-Shock has no such system available.
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The above information in not intended to indicate all-inclusive knowledge of competitive processes or competitive equipment but represents the current knowledge of the writer who has conveyed information generally available to the public. **END** 

# Energy available from AirBurst and AirShock air guns at 3000 psi

(Energy measured in foot pounds)

	AirBurst **		AirShock *
Chamber size	130		122
Equivalent TNT grams (454 grams per pound)	73	15	
Chamber size	200		262 (largest avallable)
Equivalent TNT in grams (454 grams per pound)	114		35
Chamber size	500		Not Available
Equivalent TNT grams (454 grams per pound)	273 (7.86 times greater tha	n Air-Shock	's biggest gun)

<sup>\*</sup>Information per Air-Shock brochure with no hydrostatic pressure

Example: assume 1000 bursts per well at 3000 psi. (Open rock wells only)

Air-Shock: 1000 x 35 grams = 35,000 grams or 77 pounds of TNT

AirBurst: 1000 x 273 grams = 273,000 grams or 600 pounds of TNT

Comparisons should be made by the potential results based upon the control of the energy available to accomplish your goal, not simply the exercise of discharging an air gun in a well just to say you did it.

<sup>\*\*</sup>Information per Rayleigh Curve with Bolt air guns under 30 feet of hydrostatic pressure

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Equivalent TNT in grams (454 grams per pound)	114	35	
Chamber size	500	Not Available	
Equivalent TNT grams (454 grams per pound)	273 (7.86 times greater tha	n Air-Shock's biggest gun)	

<sup>\*</sup>Information per Air-Shock brochure with no hydrostatic pressure

Example: assume 1000 bursts per well at 3000 psi. (Open rock wells only)

Air-Shock:  $1000 \times 35$  grams = 35,000 grams or 77 pounds of TNT

AirBurst: 1000 x 273 grams = 273,000 grams or 600 pounds of TNT

Comparisons should be made by the potential results based upon the <u>control</u> of the <u>energy available</u> to accomplish your goal, <u>not</u> simply the exercise of discharging an air gun in a well just to say you did it.

<sup>\*\*</sup>Information per Rayleigh Curve with Bolt air guns under 30 feet of hydrostatic pressure

# Section 5

RFP NO.: 21-059

WATER WELL, PUMP AND MOTOR REHABILITATION AND REPAIR SERVICES

## **NON-COLLUSION AFFIDAVIT**

(Title 23 United States Code Section 112 and Public Contract Code Section 7106)

In conformance with Title 23 United States Code Section 112 and Public Contract Code 7106 the BIDDER declares that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the BIDDER has not directly or indirectly induced or solicited any other BIDDER to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any BIDDER or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the BIDDER has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the BIDDER or any other BIDDER, or to fix any overhead, profit, or cost element of the bid price, or of that of any other BIDDER, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the BIDDER has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Note: The above Non-collusion Affidavit is part of the Proposal. BIDDERS are

cautioned that making a false certification may subject the certifier to

Signed

Michael Bodart - President / Director of Engineering

State of California
County of \_\_\_\_\_\_

Subscribed and sworn to (or affirmed) before me on this \_\_\_\_\_\_ day of \_\_\_\_\_\_, 20\_\_\_, by \_\_\_\_\_\_
proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me

Notary Public Signature

Notary Public Seal

## **CALIFORNIA JURAT WITH AFFIANT STATEMENT**

## **GOVERNMENT CODE § 8202**

See Attached Document (Notary to cross out lin See Statement Below (Lines 1–6 to be complete	
a see statement below (Lines 1 o to be complete	d only by document signer sign
2	
3	
Λ	
5	
Signature of Document Signer No. 1	Signature of Document Signer No. 2 (if any)
A notary public or other officer completing this certificate to which this certificate is attached, and not the truthful	e verifies only the identity of the individual who signed the document ness, accuracy, or validity of that document.
State of California	Subscribed and sworn to (or affirmed) before me
County of Los Angeles	on this <b>25th</b> day of <b>May</b> 20 <b>21</b> by <b>Date Month</b> Year
	(1) Michael Bodart
ALEXA JUAREZ  Notary Public - California  Los Angeles County  Commission # 2266422	(and (2)
My Comm. Expires Nov 10, 2022	proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.
Place Notary Seal and/or Stamp Above	Signature of Notary Public
0	OPTIONAL —
· •	can deter alteration of the document or this form to an unintended document.
Description of Attached Document	
-	
Title or Type of Document:	Number of Pages:

RFP NO.: 21-059

WATER WELL, PUMP AND MOTOR REHABILITATION AND REPAIR SERVICES

## **NON-LOBBYING CERTIFICATION**

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in conformance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

Signed:	Monton	
Title:	Michael Bodart President / Director of Engineering	
Firm:	General Pump Company, Inc.	

Date:

5/27/2021

RFP NO.: 21-059

WATER WELL, PUMP AND MOTOR REHABILITATION AND REPAIR SERVICES

## **NON-DISCRIMINATION CERTIFICATION**

The undersigned consultant or corporate officer, during the performance of this contract, certifies as follows:

- 1. The Consultant shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Consultant shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment without, regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Consultant agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 2. The Consultant shall, in all solicitations or advertisements for employees placed by or on behalf of the Consultant, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- 3. The Consultant shall send to each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Consultant's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 4. The Consultant shall comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- 5. The Consultant shall furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his/her books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation, to ascertain compliance with such rules, regulations, and orders.
- 6. In the event of the Consultant's non-compliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, the contract may be canceled, terminated, or suspended in whole or in part and the Consultant may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Execution Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulations, or order of the Secretary of Labor, or as otherwise provided by law.

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- 7. The Consultant shall include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontract or purchase order as the administering agency may direct as means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event the Consultant becomes involved in, or is threatened with, litigation with a subconsultant or vendor as a result of such direction by the administering agency, the Consultant may request that the United States enter into such litigation to protect the interests of the United States.
- 8. Pursuant to California Labor Code Section 1735, as added by Chapter 643 Stats. 1939, and as amended, no discrimination shall be made in the employment of persons upon public works because of race, religious creed, color, national origin, ancestry, physical handicaps, mental condition, marital status, or sex of such persons, except as provided in Section 1420, and any consultant of public works violating this Section is subject to all the penalties imposed for a violation of the Chapter.

Signed:	Mont son	
Title:	Michael Bodart President / Director of Engineering	
Firm:	General Pump Company, Inc.	
Date:	5/27/2021	