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ADDENDUM NO. 1 CSP # 18-0093

Date:

September 7, 2018

To:

All Interested Parties

From:

Grady Garrow, CPPB

Buyer

STEPHEN L. McCASKIE

109003

CENSE

SONAL FINANCE

FREESE AND NICHOLS, INC.

REESE AND NICHOLS, ING TEXAS REGISTERED ENGINEERING FIRM F-2144

Re:

CSP No. 18-0093 Lake Conroe Dam Relief Wells Rehabilitation

The following additions, deletions, changes or clarifications to RFP No. 18-0093 are hereby made a part of the originally issued documents for the above referenced project as fully and as completely as though the same were included therein.

Reference Documents

In response to Offerors questions on additional reference documents SJRA will make the following available on the Brazos Valley Online Bidding System and SJRA Purchasing Website for reference only:

- Complete water quality testing report prepared by Eastex Environmental Labs.
- Relief well pilot study final report prepared by TerraFirma Earth Technologies, LTD.

Videos of Well Nos. 5, 10, and 18 taken during the pilot study project will be made available to Offerors upon request. Electronic copies of the videos can be picked up from SJRA's Purchasing Department in-person. Coordinate pickup with Grady Garrow (ggarrow@sjra.net 936-588-7181) File size is approximately 15 GB and Offerors will need to provide an acceptable electronic storage device to transfer files.

Specification Documents

Section 00 21 13.02 – Instructions to Offerors

- 5. Estimated Budget: Revised Engineer's Opinion of Probable Construction Cost to \$248,000.00.

Section 00 41 00.02 - Proposal Form

- 2.0 Contract Time: Revised contract time to reach substantial completion to 165 calendar days.
- 5.0 Proposal Form: Revised Base items A3 and A5. Added Extra Unit Price Items B2 and B3.

Section 00 52 00 - Standard Form of Agreement between Owner and Contractor

- Article 3 Contract Times: Revised contract time to reach substantial completion to 165 calendar days.

Section 35 15 53 – Relief Well Maintenance

- Revised specification. Specification language that has been revised from the original version is <u>underlined</u>.

Proposal Form (Electronic Version)

Offerors shall utilize revised Excel generated Proposal Form which will replace the existing and can be downloaded from Brazos Valley Online Bidding System or SJRA Purchasing Website.

All provisions which are not so amended or supplemented remain in full force and effect.

Please acknowledge receipt of this addendum with signature and date and return with completed Proposal/Quotation. Failure to do so may cause your Proposal to be considered non-responsive.

Receipt of this Addendum No. 1 is hereby acknowledged

Authorized Signature	Date
Company Name	

SECTION 00 21 13.02CN

INSTRUCTIONS TO OFFERORS (COMPETITIVE SEALED PROPOSALS)



1. Overview of Competitive Sealed Proposal Process.

The objective of the Competitive Sealed Proposal (CSP) process is to competitively procure goods and services with the firm whose Proposal provides the best value for the Owner (SJRA). Proposals will be received, publically opened, and the names and monetary Proposals of Offerors read aloud. Subsequently, the Proposals will be ranked according to the criteria described in this CSP Document. Both cost and non-cost factors will be evaluated and scored. One or more Offerors may be invited back for discussions or to present their Proposal to the SJRA before the final rankings are made.

The SJRA may enter into contract negotiations with the highest ranked firm for the completion of the Work. If the negotiations with the highest ranked firm are unsuccessful, the SJRA will formally close negotiations with this firm and initiate contract negotiations with the next highest ranked firm. Upon Standard Form of Agreement between both parties, a Contractor-executed Contract may be recommended for approval by the SJRA Board of Directors or the SJRA General Manager, as applicable. Upon approval, the Contract will be executed by the General Manager of the SJRA.

2. Defined Terms.

- 2.1. Definitions for the following terms used in these Instructions do not replace definitions for similar terms that may be contained within other sections of the Contract Documents.
- 2.2. Certain additional terms used in these Instructions to Offerors have the meanings indicated below and are applicable to both the singular and plural thereof.
 - 2.2.1. <u>Addendum</u> or <u>Addenda</u>- Additions, deletions, and/or changes to any part of the CSP issued in writing by the Owner prior to Proposal due date and time.
 - 2.2.2 <u>Apparent Best Value Offeror</u>- the Offering Firm whose Proposal for completion of the Work provides the best value for the Owner as defined by the ranking detailed in Article 11 of Instructions to Offerors.
 - 2.2.3. <u>Board of Directors</u> The governing body of the SJRA comprised of seven (7) directors appointed to six (6) year terms by the Governor of the state of Texas.
 - 2.2.4. <u>Contract Negotiations</u>- Discussions which take place between the Owner and the Apparent Best Value Offeror in an effort to reach Standard Form of Agreement on contract scope of work, price, time and other contractual requirements.

- 2.2.5. <u>Contractor</u> The successful Offeror to this CSP who enters into a contractual relationship with the Owner for completion of the Work, following any contract approval by the SJRA Board of Directors or the SJRA General Manager, as applicable.
- 2.2.6. <u>CSP Document</u>- Abbreviation of the Competitive Sealed Proposals Document, the document used to request Competitive Sealed Proposals for the procurement of goods and services as authorized under Government Code Chapter 2269, Subchapter D.
- 2.2.7. Engineer's Opinion of Probable Construction Cost Engineer's opinion of project construction cost to Owner developed by the Principal Architect/Engineer. Actual contract amount may vary significantly.
- 2.2.8. <u>Issuing Office</u> The location from which the CSP Documents are issued. For this project the issuing office is San Jacinto River Authority, 1577 Dam Site Road Conroe, Texas 77304.
- 2.2.9. Offeror, Offering Firm- Firm which responds to a CSP by submitting a Proposal directly to Owner. Offeror and Offering Firm shall have the same meaning in the Instructions to Offerors.
- 2.2.10. Owner The San Jacinto River Authority (SJRA).
- 2.2.11. <u>Proposal</u>- Offeror's submittal which conforms to the requirements set forth in this CSP.
- 2.2.12. <u>Proposal Form</u>- As detailed in the requirements of this CSP, contains unit pricing for all parts of the Work and their aggregate as detailed and affirmed on the Proposal Form and may include additional forms supplied by Offeror and/or the Owner that relate to the Offeror's proposed cost for completing the Work.
- 2.2.13. <u>SJRA-</u> San Jacinto River Authority, a government agency whose mission is to develop, conserve, and protect the water resources of the San Jacinto River basin.
- 2.2.14. <u>Statement of Qualifications</u>, <u>(SOQ)</u> Offeror submitted documents which describe the Offering Firm's qualifications for performing the Work and contain no pricing or cost data. Requirements for the Statement of Qualifications (SOQ) are set forth in Article 8 and Article 10 of the Instructions to Offerors (this CSP).
- 2.2.15. <u>Subcontractor</u> Any contractor hired by the Contractor to furnish services, or goods and services, specified in this CSP.
- 2.2.16. <u>Successful Offeror</u> The Firm who has completed negotiations with the Owner and, following any approval by the SJRA Board of Directors or the SJRA General Manager, as applicable, is selected to enter into a Contract with the Owner to complete the Work.
- 2.2.17. <u>Supplier</u>- Any supplier of materials and/or equipment to Contractor for the Project.

INSTRUCTIONS TO OFFERORS

3. Schedule.

CSP Documents Posted on Website: August 17, 2018
Legal Advertisements: August 17, 2018
August 24, 2018

Pre-Proposal Conference (Mandatory): August 30, 2018, 10:00 AM (CST)
Deadline for Questions and Inquiries: September 11, 2018, 11:00 AM (CST)
Proposal Submission Deadline: September 20, 2018, 11:00 AM (CST)

Anticipated Construction Start: November 2018

4. Competitive Sealed Proposal Documents/Copies.

- 4.1. This Request for Competitive Sealed Proposals (CSP) consists of the following documents:
 - 4.1.1. Invitation to Submit Proposals (00 11 13);
 - 4.1.2. Instructions to Offerors (00 21 13.02);
 - 4.1.3. Proposal Form (00 41 00.02), Contractor shall also complete and submit the provided Microsoft Excel spreadsheet of the Proposal Form;
 - 4.1.4. Statement of Qualifications (00 21 13.03);
 - 4.1.5. All Contract Documents referenced in this CSP;
 - 4.1.6. Addenda to this CSP issued by the SJRA Purchasing Department;
 - 4.1.7. Any attached forms; and
 - 4.1.8. Proposal Security (Offeror's Bond)
- 4.2. A complete set of CSP Documents may be accessed at the Brazos Valley Online Bidding System (http://brazosbid.cstx.gov) or via a link from the SJRA Website (www.SJRA.net) Purchasing Tab (Bid opportunities). Interested parties that are not already registered on the Brazos Valley Online Bidding System website site must register as a "New Vendor" in order to download the CSP Document(s) and receive automatic notification of Addenda.
- 4.3. Complete sets of CSP Documents must be used in preparing Proposals; neither Owner nor Principal Architect/Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of CSP Documents.
- 4.4. Owner and Principal Architect/Engineer, in making copies of CSP Documents available on the above terms, do so only for the purpose of obtaining Proposals for the Work and do not confer a license or grant for any other use.

5. Competitive Sealed Proposal Process\Contract Documents.

5.1. All questions about the Competitive Sealed Proposal Process or the meaning or intent of the Contract Documents are to be directed to the SJRA Purchasing Department. Contact:

Grady B. Garrow, CPPB Buyer, San Jacinto River Authority ggarrow@sjra.net (936)-588-7181

- 5.2. Any questions submitted via the Brazos Valley Online Bidding System website on the appropriate webpage for submitting questions shall be the equivalent of contacting the SJRA Purchasing Department directly (via phone or email).
- 5.3. Interpretations or clarifications considered necessary by Owner in response to such questions will be issued by Addenda and posted on the Brazos Valley Online Bidding website, www.brazosbid.cstx.gov and via a link from the SJRA Website (www.SJRA.net) Purchasing Tab (Bid opportunities).

6. Pre-Submittal Conference.

- 6.1. A single mandatory Pre-Submittal Conference will be conducted at the San Jacinto River Authority, G&A Building, 1577 Dam Site Road, Conroe, TX 77304, (936-588-3111) at 10:00 A.M, August 30, 2018. Representatives of Owner and Principal Architect/Engineer will be present to discuss the project. Proposals will not be accepted from offering firms who fail to attend the pre-submittal conference.
- 6.2. All questions about the meaning or intent of the Competitive Sealed Proposal and Contract Documents are to be directed to the SJRA Purchasing Department. The SJRA Purchasing Department will address all questions as Owner considers necessary in response to inquiries arising at the conference through written Addenda and posted on the Brazos Valley Online Bidding System website: http://brazosbid.cstx.gov and via a link from the SJRA Website (www.SJRA.net) Purchasing Tab (Bid opportunities). Oral statements may not be relied upon and will not be binding or legally effective.

7. Estimated Budget.

- 7.1. An Engineer's Opinion of Probable Construction Cost (project cost estimate) has been generated by the Principal Architect/Engineer. If an award is made, the actual contract amount may vary.
- 7.2. The Engineer's Opinion of Probable Construction Cost for this project is \$\frac{1}{248,000.00}\$.

8. Basis for Ranking of Proposals.

8.1 The Owner will consider the qualifications (Statement of Qualifications) of the Offerors and their respective proposed Contract Price (Proposal Form) when evaluating Proposals to determine which Offeror, in the sole opinion of the Owner, will provide the best value to the Owner. All procurements shall conform to

Chapter 2269 of the State of Texas Government Code. The Proposals will be evaluated using the following criteria and weighting:

8.1.1. Proposed Project Cost: The Offeror's Proposed Cost of Performing the Work shall be indicated as the "Total Proposal Price" (indicated as "E" on the Proposal Form (Specification Section 00 41 00.02). The Owner has established an internal budget for this Project. The Total Proposal Price is defined per the Proposal Form to include the cost(s) of the proposed Total Base Items ("A"). The Total Proposal Price may and at the Owner's sole discretion, be inclusive of the individual or collective costs associated with the Offeror's Total Extra unit Price Items ("B"), Total Cash Allowances ("C"), and Total Alternate Items ("D") costs. For example: Total Proposal Price ("E") = A + B + C + D.

The Owner will evaluate the Total Proposal Price (including an requested costs for Extra Unit Price Items, Cash Allowances and Alternate Items, as identified) that the Owner can award with their available budget at the time Contract is negotiated. Attach the Proposal Form and all information/documents required to be submitted with the Proposal. Contractor shall also complete and submit the provided Microsoft Excel spreadsheet of the Proposal Form.

8.1.2. Experience/Past Performance of Offeror with Similar Projects: Provide general information about the Organization as required in Table 1 and Table 2 of Specification Section 00 21 13.03 Statement of Qualifications (SOQ). Provide any additional information as required by the Construction Experience section of Table 2. Describe the Organizational structure and the qualifications of the management team as it relates to this Project in Table 3. Provide a narrative format as described in Table 4, describe Offeror's experience as a general contractor and describe the Organization's operating philosophy and approach to constructing, completing, and commissioning projects. Describe the Organization's approach to managing Subcontractors and Suppliers (Table 11), quality management and construction contract administration. Limit the narrative portion responding to this criterion to no more than 10 pages in length. Provide a list of projects completed by the Organization in the last five (5) years using copies of Table 5.

The relief well maintenance shall be performed by a Contractor with at least 10 years of experience in the installation, inspection and testing, mechanical cleaning, and chemical treatment of relief or similar wells. Contractor's experience shall include the safe handling and use of the chemicals used for the Work. Documentation of this experience, along with a minimum of three references and their contact information, shall be submitted for approval by the Owner and the Project Architect / Engineer.

Offeror must demonstrate experience in the construction of projects of similar construction cost and/or techniques and describe how they intend to provide the needed experience and expertise. Submit descriptions of projects on which proposed key personnel have experience by submitting completed copies of the attached Table 12, with at least one project for each of the key individuals. If Offeror does not have specific experience with projects of this type and magnitude, the Offeror may describe its proposed approach and how its experience with other projects enhances its capability to successfully complete this Project. Offeror may submit photographs, project descriptive narratives, letters of recommendation, project awards, and references to demonstrate experience in constructing a project which meets the Owner's expectations for a quality Project constructed on time and within budget (Table 14). This narrative is not to exceed one (1) page in length.

Provide information to demonstrate the ability of the Organization to complete projects within budget and on time. Offerors are to provide a tabulation of all projects completed by the Organization within the last five (5) years on Tables 12 and 13 to demonstrate performance in these areas. Comments may be added to the tabulations to indicate any reasons for amending the contract amounts or completion dates. Provide narrative information to indicate the number of projects and dollar volume currently under contract by the Organization and the projected completion date of each active project. Describe how the resources dedicated to these assignments will impact Offeror's ability to effectively execute the construction of this Project. Provide an estimate of the amount of the Project that will be done using in-house resources and the amount to be performed by Subcontractors and Suppliers. This narrative is not to exceed five (5) pages in length.

8.1.3. Experience and Qualifications of Proposed Key Personnel with Similar Projects: Provide information on the managerial structure and the key personnel that will be actively working on this Project in Tables 6 through 10 and Table 12. Key personnel include the Project Manager, Project Superintendent, Safety Manager, and Quality Control Manager. If more than one of these key roles are to be filled by one individual, this information is to be provided with the list of proposed individuals. The Offeror is to provide a list of individuals from which the individual for any given position may be selected if the Offeror is not able to commit to one individual for the Project at the time the Proposal is submitted. Qualifications of these individuals will be considered in evaluating the qualifications of the Offeror. The Proposal must provide the services of the proposed key personnel for the life of the Project as a condition of qualification. Failure to provide the proposed key Personnel may result in the disqualification of the Offeror and may void the award of the Contract.

Provide the resumes (not to exceed one page for each) of proposed key personnel with the SOQ describing their education and experience in Table 6. Include more detailed information on Projects on which they have had significant involvement in the last five (5) years, or that demonstrate their experience with similar Projects. This list is to include the name and a current telephone number for references of each of these Project assignments. Offerors are to include a list of the current Project assignments for each of the individuals proposed, the anticipated completion date for this assignment and the percentage of the time they will have available to devote to this Project. The Project Superintendent must be dedicated to this Project full time for the duration of the Project.

- 8.1.4. Project Approach: The Offeror shall include a brief write-up, not to exceed three (3) pages, that summarizes the Offeror's approach to overall project sequence of construction for entire project limits and corresponding time lines, proposed construction methods, and site restoration. Other factors that may be included include, but are not limited to, contract administration, management of subcontractor and suppliers, time management, cost control, quality management, project site safety, managing changes to the project, managing equipment, etc.
- 8.1.5. Financial Management (Stability): Provide the past two (2) years of available financial statements, preferably audited, with this Proposal. Provide financial statements showing the name and address of the firm preparing the financial statements and the date of preparation. Offerors may choose to report on the financial stability of their Organization to demonstrate that they have the ability to complete the Project in a manner that will not impose undue efforts on the part of the Owner to invoke rights under bonds to complete the Project or for Offeror to meet financial obligations. Describe the Offeror's systems and philosophy for financial management of the Project. Describe Offeror's systems and philosophy for contracting with Subcontractors and Suppliers and managing payments and retainage. Provide other information if desired to demonstrate solid financial management practices that will enhance completion of the Project. This narrative is not to exceed two (2) pages in length.

This is a Pass or Fail. Any Offeror receiving a score of "Fail", will be automatically disqualified.

8.2. Table of criteria and weighting for the ranking of Offeror's Proposals.

Rating Category	Description	Weighting Points
8.1.1	Proposed Project Cost	50
8.1.2	Experience/Past Performance of Offeror with	15
0.1.2	Similar Projects	

8.1.3	Experience and Qualifications of Proposed Key Personnel with Similar Projects	15
8.1.4	Project Approach	20
8.1.5	Financial Management (Stability)	Pass/Fail
	Total	100

9. Proposal Form.

- 9.1. A Proposal Form (00 41 00.02) is included with the CSP Documents; additional copies may be obtained at http://www.sjra.net (Purchasing Tab) or directly at http://brazosbid.cstx.gov. Interested parties that are not already registered on the Brazos Valley Online Bidding System website must register as a "New Vendor" to download the CSP Document(s) and receive automatic notification of Addenda.
- 9.2. All blanks on the Proposal Form must be completed in ink, by hand, or electronically printed.
- 9.3. Contractor shall also complete and submit the provided Microsoft Excel spreadsheet of the Proposal Form. Template may be obtained at http://www.sjra.net (Purchasing Tab) or directly at http://brazosbid.cstx.gov.
- 9.4. The Proposal price shall include such amount as the Offeror deems proper for overhead and profit.

10. Offering Firm's Statement of Qualifications (SOQ).

- 10.1. SOQs shall not exceed fifteen (15) pages, including transmittal letters and narratives, and excluding completed SOQ tables and attachments, covers and plain section dividers. SOQs shall be printed on single side 8 ½" by 11" pages with not less than 1 inch margins, not less than 1.25 line spacing and not less than 11 point font.
- 10.2. The SOQ must be submitted with the Proposal and include, as a minimum, the information as described in Article 8, Basis for Ranking of Proposals. Failure to submit the required information in the SOQ may result in the Owner considering the Proposal non-responsive and result in rejection of the Proposal by Owner. Offerors may be required to provide supplemental information if requested by the Owner to clarify, enhance or supplement the information provided in the SOQ.
- 10.3. Offerors must provide requested SOQ information using the tables provided in Specification Section 00 21 13.03 - Statement of Qualifications. A copy of these tables will be made available in Microsoft Word to assist with the preparation of the SOQ. Information in these tables must be provided completely and in detail. The information in these tables will be used to make direct comparisons with the

information provided by other Offerors. Failure to include the information completely and clearly may result in lower scores in the evaluations. Information that cannot be totally incorporated in the table may be included in an appendix to the table. Appendices must be clearly referenced by appendix number in the table, and the appended material must include the appendix number on every sheet of the appendix. Each appendix must include only the information that responds to the question or item number to which the appended information applies. The required tables are listed below:

Table 1	General Information
Table 2	Organizational Experience
Table 3	Organizational Structure
Table 4	Project Experience and Resources
Table 5	Current Projects and Projects Completed within the last 5 Years
Table 6	Proposed Key Personnel
Table 7	Proposed Project Managers
Table 8	Proposed Project Superintendent
Table 9	Proposed Project Safety Manager
Table 10	Proposed Quality Control Manager
Table 11	Subcontractors and Suppliers
Table 12	Project information for Key Personnel
Table 13	Demonstration of Budget Performance
Table 14	Demonstration of On-time Performance

10.4. Offerors may provide supplemental information to the SOQs using AIA, AGC or other industry standard SOQ tables and / or Offerors may submit additional information such as organizational brochures or other marketing information to help demonstrate their ability to provide best value to the Owner. This information may not be submitted as a substitute to the information specifically requested in this Section, or in the SOQ tables. If this information is to be included as an appendix to the information requested in Article 10.3. (above), the appendix must specify the paragraph or section to which the appendix applies and the paragraph or section must accurately reference the appendix.

11. Ranking of Offeror's Proposals.

11.1. The Owner will consider the qualifications (Statement of Qualifications) of the Offerors and Offeror's proposed Subcontractors, Suppliers and consultants, in

addition to the proposed cost(s) (Proposal Form) when evaluating Proposals to determine which Proposal offers the best value to the Owner. Owner will rank each of the Offeror's Proposals based on the criteria and criteria weighting described in Article 8, Basis for Ranking of Proposals.

- 11.2. Evaluation and ranking of the Proposals will be completed no later than the 45th Calendar day after the date of Proposal opening. Offerors are requested not to withdraw their Proposals within ninety (90) Calendar days from the date on which Proposals are opened. Proposal Security of the highest ranking firms will be held by the Owner until contract negotiations are finalized.
- 11.3. In evaluating Proposals, Owner will consider the selection criteria set forth in Article 8 of these Instructions to Offerors and whether or not the Proposals comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested by Owner.
- 11.4. Owner may consider the qualifications and experience of Subcontractors, Suppliers, and other persons and organizations proposed for those portions of the Work as to which the identity of Subcontractors, Suppliers, and other persons and organizations must be submitted as provided in the General Conditions. Owner may also consider the operating costs, maintenance requirements, performance data and guarantees of major items of materials and equipment proposed for incorporation in the Work when such data is required to be submitted prior to recommendation of award to Owner's Board of Directors or its General Manager, as applicable.
- 11.5. Owner may conduct such investigations as Owner deems necessary to assist in the evaluation of any Proposal and to establish the responsibility, qualifications and financial ability of Offerors, proposed Subcontractors, Suppliers and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to Owner's satisfaction within the prescribed time.
- 11.6. The Owner, at its discretion, may also choose to conduct interviews with the top ranking Offerors to provide Offerors a better opportunity to demonstrate they can provide the best value to the Owner for this Project. Should the Owner choose to conduct interviews with the top ranking Offerors, they will be notified of:
 - 11.6.1. The time and place for the interview.
 - 11.6.2. Interview format and agenda.
 - 11.6.3. Questions to prepare for the interview.
 - 11.6.4. Individuals that are expected to participate in the interview.

Failure to participate in the interview may result in disqualification from consideration for the Project.

12. Award of Contract.

- 12.1. It is the intent of the San Jacinto River Authority to award this contract to the Offering Firm whose Proposal for completion of the Work provides the best value for the Owner after consideration of the relative importance of costs and other evaluation factors described in the Basis for Ranking Proposals set forth in Article 8 of these Instructions to Offerors.
- 12.2. The Owner reserves the right to adopt the most advantageous interpretation of the Proposals submitted in the case of ambiguity or lack of clearness in stating Proposal Prices, to reject any or all Proposals, and/or to waive informalities.
- 12.3. Owner reserves the right to reject any or all Proposals, including without limitation the rights to reject any or all nonconforming, nonresponsive, unbalanced, or conditional Proposals and to reject the Proposal of any Offeror if Owner determines that an award to that Offeror would not provide the best value for the Owner, whether because the Proposal is not responsive or the Offeror is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by Owner.
- 12.4. Owner also reserves the right to waive all informalities not involving price, time or changes in the Work and to negotiate contract terms with the Apparent Best Value Offeror. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.
- 12.5. The qualifications of a firm shall not deprive the Owner of the right to accept a Proposal, which in its judgment offers the best value to the Owner. In addition, the Owner reserves the right to reject any Proposal where circumstances and developments have, in the opinion of the Owner, changed the qualifications or responsibility of the firm.
- 12.6. Material misstatements in the information submitted for evaluation may be ground for rejection of Offeror's Proposal. Any such misstatement, if discovered after award of the contract to such firm, may be grounds for immediate termination of the contract. Additionally, the Offeror will be liable to the Owner for any costs or damages to the Owner resulting from such misstatements, including costs and attorneys' fees for collecting such costs and damages.
- 12.7. If the Contract is to be awarded, it will be awarded to the Apparent Best Value Offeror following successful Contract Negotiations and following any required

- approval by the SJRA Board of Directors or the SJRA General Manager, as applicable.
- 12.8. If Contract Negotiations with the Apparent Best Value Offeror are unsuccessful, The Owner will formally close Contract Negotiations with this Firm and attempt to open Contract Negotiations with the next highest-ranked firm according to the selection criteria set forth in Article 8 of these Instructions to Offerors.
- 12.9. If the Contract is to be awarded, Owner will notify Successful Offeror of intent to submit contract for approval by SJRA's Board of Directors within ninety (90) Calendar days after the day of the Proposal opening. Following approval by the SJRA Board of Directors or the SJRA General Manager, as applicable, the General Manager of the SJRA may execute the contract.
- 12.10. The Offeror may submit exceptions or alternatives not in accordance with the terms and conditions of the Contract Documents, or for Work that is not in strict compliance with the Contract Documents. In such event, Offeror must describe the intent and substance of the changes in the Proposal in adequate detail so they are clearly identifiable and understandable. Alternates will not be considered in the ranking and evaluation of the Proposals. Upon selection of the Proposal that offers the best value to the Owner, the Owner and Principal Architect/Engineer may consider proposed alternates in negotiating a final Contract scope, time/schedule and price.
- 12.11. Addenda may be issued to clarify, correct, or change the Contract Documents, prior Addenda or the related supplemental data as deemed advisable by Owner or Principal Architect/Engineer.

13. Interpretation and Addenda.

13.1. All questions about the meaning or intent of the Competitive Sealed Proposal and Contract Documents are to be directed to the SJRA Purchasing Department in writing. Interpretations or clarifications considered necessary by Owner's Representative in response to such questions will be issued by written Addenda and posted on the Brazos Valley Online Bidding System website, http://brazosbid.cstx.gov and via a link from the SJRA Website (www.SJRA.net) Purchasing Tab (Bid opportunities).

Contact:

Grady B. Garrow, CPPB Buyer, San Jacinto River Authority ggarrow@sjra.net (936)-588-7181 Any questions submitted via the Brazos Valley Online Bidding System website on the appropriate webpage for submitting questions shall be the equivalent of contacting the SJRA Purchasing Department directly (via phone or email).

- 13.2. To properly qualify their Proposal, each Offeror shall, prior to submitting their Proposal, check the receipt of all Addenda and acknowledge such receipt on the Proposal Form and on the acknowledgement line of the Addendum Cover page. Proposals submitted without such acknowledgment of all issued Addenda and letters of clarification may cause Proposal to be considered non-responsive. Such Addenda and letters of clarification shall become a part of the executed contract and modify the contract documents accordingly.
- 13.3. Questions received after the deadline for Questions and Inquiries may not be answered.
- 13.4. Only questions answered by formal written Addenda issued by Owner will be binding. Oral and other interpretations or clarifications will be without legal effect.
- 13.5. Addenda may be issued to clarify, correct, or change the Contract Documents, Addenda or the related supplemental data as deemed advisable by Owner or Principal Architect/Engineer. Addenda may also be issued to modify the CSP Documents as deemed advisable by Owner or Principal Architect/Engineer.
- 13.6. Notification of addenda will be by default via the Brazos Valley Online Bidding System (http://brazosbid.cstx.gov), provided that the Offeror has registered on the Brazos Valley Website and downloaded from the site the CSP Documents.
- 13.7. The Owner will not be responsible or liable for any failure of the Brazos Valley Online Bidding System notification to reach Offeror. Offerors are encouraged to visit the webpage where the CSP Documents are issued until the legal limit for filing addenda (48 hours prior to Proposal due date and time) has passed to ensure receipt of all addenda.

14. Confidentiality of Proposal Information.

All materials submitted to the SJRA and upon receipt by the SJRA become public property and are subject to the Texas Public Information Act, Government Code Chapter 552. If an Offeror does not desire proprietary Information in the SOQ to be disclosed, each page must be identified and marked proprietary at the time of submittal. The SJRA will, to the extent provided by law, endeavor to protect such information from disclosure. The final decision as to what information must be disclosed, however, lies with the Texas Attorney General. Failure to identify proprietary information will result in all unmarked sections being deemed non-proprietary and available to the public upon request. Proposers shall not be permitted to mark entire Proposal as proprietary.

15. Examination of Contract Documents and Site.

- 15.1. It is the responsibility of each Offeror before submitting a Proposal:
 - 15.1.1. To examine thoroughly the Contract Documents and other related data identified in the CSP Documents (including "technical data" referred to below);
 - 15.1.2. To visit the site to become familiar with and satisfy Offeror as to the general, local and site conditions that may affect cost, progress, performance or furnishing of the Work;
 - 15.1.3. To consider federal, state and local Laws and Regulations that may affect cost, progress, performance or furnishing of the Work;
 - 15.1.4. To study and carefully correlate Offeror's knowledge and observations with the Contract Documents and such other related data; and
 - 15.1.5. To promptly notify The SJRA Purchasing Department of all conflicts, errors, ambiguities or discrepancies which Offeror has discovered in or between the Contract Documents and such other related documents.
- 15.2. Reference is made to the General Conditions Article 4 and Contract Specification Section 00 31 19 – Existing Condition Information for identification of:
 - 15.2.1. Reports of explorations and tests of subsurface conditions at or contiguous to the site which have been utilized by Principal Architect/Engineer in preparation of the Contract Documents. While such reports are intended to be an accurate record of the conditions at the specific boring locations on the date taken, it is not a guarantee of specific Site conditions which may vary between boring locations and over time, and Offerors may not rely upon the general accuracy of the "technical data" contained in such reports and upon other data, interpretations, opinions or information contained in such reports or otherwise relating to the subsurface conditions at the site, nor upon the completeness thereof for the purposes of preparing a Proposal for construction.
 - 15.2.2. Copies of such reports will be made available by Owner to any Offeror on request. Such reports are not part of the Contract Documents. Offeror is responsible for any interpretation or conclusion drawn from any "technical data" or any such data, interpretations, opinions or information. Offeror acknowledges that Owner and Principal Architect/Engineer disclaim any responsibility for the accuracy, correctness, completeness, suitability, and sufficiency of such reports and for Offeror's interpretation of such reports.
- 15.3. Information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the site are based upon

information and data furnished to Owner and Principal Architect/Engineer by owners of such Underground Facilities or others, and Owner and Principal Architect/Engineer do not assume and expressly disclaim responsibility for the accuracy or completeness thereof or for Offeror's interpretation of such information and data. The Contractor is advised to coordinate closely with Owner, Principal Architect/Engineer and Utility Operator(s) prior to the commencement of any underground construction activities.

- 15.4. Provisions concerning responsibilities for the adequacy of data furnished to prospective Offerors with respect to subsurface conditions, other physical conditions and Underground Facilities, and possible changes in the Contract Documents due to differing or unanticipated conditions appear in Article 6 of the Standard Form of Agreement and Article 4.2 of the General Conditions.
- 15.5. Before submitting a Proposal, each Offeror will be responsible for obtaining such additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and underground facilities) at or contiguous to the site or otherwise, which may affect cost, progress, performance or furnishing of the Work, or which relate to any aspect of the means, methods, techniques, sequences or procedures of construction to be employed by Offeror and safety precautions and programs incident thereto or which Offeror deems necessary to determine its Proposal for performing and furnishing the Work in accordance with the time, price and other terms and conditions of the Contract Documents.
- 15.6. On request, the SJRA Purchasing Department may provide each Offeror access to the site to conduct such examinations, investigations, explorations, tests and studies, as each Offeror deems necessary for submission of a Proposal. Offeror must fill any resultant holes and clean up and restore the site to its former condition upon completion of such explorations, investigations, tests and studies.
- 15.7. The lands upon which the Work is to be performed, rights-of-way and easements for access thereto and other lands designated for use by Contractor in performing the Work are identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by Contractor. Easements for permanent structures of permanent changes in existing facilities are to be obtained and paid for by Owner unless otherwise provided in the Contract Documents.
- 15.8. Reference is made to Specification Section 01 11 13 Work Covered By Contract Documents for the identification of the general nature of Work that is to be performed at the site by the Owner or others (such as utilities and other prime Contractors) that relates to the Work for which a Proposal is to be

- submitted. On request, Owner may provide to each Offeror for examination access to or copies of Contract Documents (other than portions thereof related to price) for such Work.
- 15.9. The submission of a Proposal will constitute an incontrovertible representation by Offeror that Offeror has complied with every requirement of this Article 15, that without exception the Proposal is premised upon performing and furnishing the Work required by the Contract Documents and applying the specific means, methods, techniques, sequences or procedures of construction (if any) that may be shown or indicated or expressly required by the Contract Documents, that Offeror has given Owner or Principal Architect/Engineer written notice of all conflicts, errors, ambiguities and discrepancies that Offeror has discovered in the Contract Documents and the written resolutions thereof by Principal Architect/Engineer are acceptable to Offeror, and that the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.
- 15.10. The provisions of 15.1 through 15.9, inclusive, do not apply to Asbestos, Polychlorinated biphenyls (PCBs), Petroleum, Hazardous Waste or Radioactive Material covered by Article 4.4 Hazardous Conditions of the General Conditions.

16. Proposal Security.

- 16.1. Each Proposal must be accompanied by Proposal Security made payable to the Owner in the amount not less than five percent (5%) of the total Proposal Amount, including any Cash Allowances and Alternates, and shall be in the form of a cashier's check or Offeror's Bond.
- 16.2. Offeror's Bond must be on the form provided within the Contract Documents (CSP) and must bear the impressed seal of the Surety, and be signed by the Offeror and an authorized individual of the Surety. Bonds will only be accepted from Sureties authorized to issue bonds in accordance with state law.
- 16.3. The Proposal Security of Successful Offeror will be retained until such Offeror has executed the Standard Form of Agreement, furnished the required contract securities and met the other conditions contained in Specification Section 00 41 00.02 Proposal Form, whereupon the Proposal Security will be returned. If the Offeror fails to execute and deliver the Standard Form of Agreement and furnish the required contract security within ten (10) Calendar days after the SJRA Board of Directors has approved a contract award, Owner may annul its award and the Proposal Security of that Offeror will be forfeited. The Proposal Security of other Offerors whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of the seventh day after the Effective Date of the Standard Form of Agreement or the ninety-first day after the Proposal opening, whereupon Proposal Security furnished by such Offerors will be returned. Proposal Security, if submitted in the form of

cashier's check, submitted with Proposals which are not competitive will be returned within ten (10) Calendar days after the Proposal opening.

17. Contract Times.

The number of Calendar days within which, or the dates by which, the Work is to reach Substantial and Final Completion are set forth in Specification Section 00 52 00 – Standard Form of Standard Form of Agreement between Owner and Contractor.

18. Substitutes and "Or-Equal" Items.

The Contract, if awarded, will be on the basis of goods and services described in the Drawings or specified in the Specifications with consideration for possible substitute or "or equivalent" items. Whenever it is indicated in the Drawings or specified in the Specifications that a substitute or "or-equal"/"or equivalent" item of material or equipment may be furnished or used by Contractor if acceptable to Principal Architect/Engineer and Owner, application for such acceptance may be made prior to Contract award in accordance with Texas Government Code 2269.155. See section 6.02.5 in the General Conditions of the Contract for more information.

19. Subcontractors, Suppliers and Others.

19.1. If the Owner requests the identity of certain Subcontractors, Suppliers or other persons or organizations (including those who are to furnish the principal items of material and equipment) to be submitted to Owner, Apparent Best Value Offeror, and any other Offerors so requested, shall within five (5) Calendar days from request submit to Owner a list of all such Subcontractors, Suppliers or other persons or organizations proposed for those portions of the Work for which such identification is requested. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, person or organization if requested by Owner. If the Owner or Principal Architect/Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, other person or organization, Owner may, before giving notice of its intent to recommend award to Owner's Board of Directors, request that Apparent Best Value Offeror submit an acceptable substitute without an increase in price.

If Apparent Best Value Offeror declines to make any such substitution, Owner may formally close contract negotiations with Offeror and enter into contract negotiations with the next most highly-ranked Offeror that proposes to use acceptable Subcontractors, Suppliers and other persons and organizations. The declining to make requested substitutions will not constitute grounds for sacrificing the Proposal Security of any Offeror. Any Subcontractor, Supplier, other person or organization listed and to whom Owner or Principal Architect/Engineer does not make written objection prior to giving notice of its

intent to recommend Award to Owner's Board of Directors will be deemed acceptable to Owner and Principal Architect/Engineer, subject to revocation of such acceptance after the Effective Date of the Standard Form of Agreement as provided in Article 6.04 of the General Conditions.

19.2. No Contractor shall be required to employ any Subcontractor, Supplier, other person or organization against whom Contractor has reasonable objection.

20. Preparation of Proposals.

- 20.1. Prepare one (1) unbound original of the complete Proposal Package, including the completed Proposal Form 00 41 00.02. Clearly mark this package with the word "Original". Prepare one (1) bound copy with original signatures, and one (1) electronic copy on Compact Disc or flash drive (in .pdf format) with a completed Proposal with original signatures, Statement of Qualifications 00 21 13.03, and a full set of Financials.
- 20.2. An Original Proposal is the Proposal containing the Original Signature of a person authorized to sign on behalf of the Offering Firm.
- 20.3. Proposals shall be enclosed in an opaque sealed Envelope (or Package), marked with CSP No. 18-0093 Lake Conroe Dam Relief Wells Rehabilitation and name and address of Offering Firm.
- 20.4. Each Original Proposal submitted by an Offeror shall contain the following:
 - 20.4.1. Offerors Statement of Qualifications (SOQ; 00 21 13.03);
 - 20.4.2. Completed Proposal Form (00 41 00.02), Contractor shall also complete and submit the provided Microsoft Excel spreadsheet of the Proposal Form;
 - 20.4.3. Completed Certification of Proposal (00 41 00.02);
 - 20.4.4. Completed Felony Conviction Notice Form (00 41 00.02)
 - 20.4.5. Form of Business (00 45 20);
 - 20.4.6. Proposal Security (Offeror's Bond 00 43 13);
 - 20.4.7. Resolution of Contractor (00 45 43);
 - 20.4.8. Conflict of interest Forms (Form CIQ; 00 45 10) shall be submitted under a separate cover and not included in the sealed Proposal;
 - 20.4.9. One (1) flash drive with a Completed Proposal with Original signatures, Statement of Qualifications (SOQ) and a full set of Financials; and
 - 20.4.10. Any other Documentation required by the terms of this Competitive Sealed Proposal.
- 20.5. Conflict of Interest Questionnaire, Specification Section 00 45 10 of Contract shall be submitted under separate cover. If Offering Firm affirms that there are no Conflicts of Interest, Offeror shall indicate so by writing name of firm and "No Conflicts" on CIQ form and signing form.

- 20.6. Proposals submitted by corporations must be executed in the corporate name by the president or a vice-president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal must be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation must be shown below the signature.
- 20.7. Submitted Proposals by partnerships must be executed in the partnership name and signed by a partner, whose title must appear under the signature and the official address of the partnership must be shown below the signature.
- 20.8. All names must be typed or printed in ink below the signature.
- 20.9. The Proposal shall contain an acknowledgment of receipt of all Addenda (the numbers of which must be filled in on the Proposal Form).
- 20.10. The address and telephone number for communications regarding the Proposal must be shown.
- 20.11. Evidence of authority to conduct business as an out-of-state corporation in the state where the Work is to be performed shall be provided in accordance with Specification Section 00 41 00.02 Proposal Form. State Contractor license number, if any, must also be shown.

21. Submission of Proposals.

- 21.1. Proposals shall be submitted at the time and place indicated in the Invitation to Submit Proposals (00 11 13) and accompanied by the Proposal Security and other required documents.
- 21.2. If the Proposal is sent through the mail or other delivery system the sealed envelope shall be enclosed in a separate envelope with the notation "SEALED PROPOSAL ENCLOSED" on the face of it. Proposals not received by the time or at the location specified will be returned unopened to the Offeror.
- 21.3. The clock used by the Owner at the place used for receiving Proposals shall conclusively determine the time that Proposals are received.
- 21.4. Proposals sent by facsimile or electronic mail or delivered to any other location other than the address provided in the Invitation to Offerors will NOT be accepted.

22. Modification and Withdrawal of Proposals.

22.1. Proposals may be modified or withdrawn by a document duly executed (in the same manner that a Proposal must be executed) and delivered to the place

where Proposals are to be submitted prior to the date and time for the opening of Proposals.

22.2. If, within twenty-four (24) hours after Proposals are opened, any Offeror files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material or substantial mistake in the preparation of its Proposal, that Offeror may withdraw its Proposal. The Proposal Security may be retained by the Owner if Offeror cannot clearly demonstrate to the Owner evidence of a material or substantial mistake in its Proposal. Thereafter, that Offeror may be disqualified from responding to a reissued CSP for the Work to be furnished under these Contract Documents.

23. Opening of Proposals.

Proposals will be opened and (unless obviously non-responsive) the names and Monetary Proposals of Offering Firms read aloud at a public opening. An abstract of the Proposals will be made available no later than the seventh day after the Contract is awarded.

24. Proposals to Remain Subject to Acceptance.

All Proposals will remain subject to acceptance for ninety (90) Calendar days after the date of the opening, but Owner may, in its sole discretion, release any Proposal and return the Proposal Security prior to that date.

25. Prevailing Wage Rates.

Contractors for this Project must pay no less than the prevailing wage rates for the area established by the San Jacinto River Authority and included in Specification Section – 00 73 43 – Wage Scale for Construction.

26. Liquidated Damages or Economic Disincentives.

Provisions for liquidated damages or economic disincentives are set forth in Specification Section 00 52 00 -Standard Form of Standard Form of Agreement between Owner and Contractor and Specification Section 00 72 00 – General Conditions of the Contract.

27. Contract Security and Insurance.

Article 5 of the General Conditions sets forth Owner's requirements as to insurance and Performance and Payment Bonds. When the Successful Offeror delivers the original, hard copy executed Standard Form of Agreement to Owner, it must be accompanied by evidence of insurance and unsigned Performance and Payment Bonds as required by Article 5 of the General Conditions, unless prior written approval

of Contractor's evidence of insurance and unsigned performance and payment Bond forms has been received from the SJRA Purchasing Department. Such evidence of insurance shall include, without limitation, all required certificates and endorsements, evidencing all required coverages, limits of liability, additional insured status, waivers of subrogation and other insurance requirements.

28. Conflict of Interest and Disclosure of Interested Parties.

28.1 Chapter 176 of the Texas Local Government Code mandates the public disclosure of certain information concerning persons doing business or seeking to do business with the San Jacinto River Authority, including affiliations and business and financial relationships such persons may have with San Jacinto River Authority officers. An explanation of the requirements of Chapter 176, applicable forms and a complete text of the law are available at: http://www.ethics.state.tx.us/forms/CIQ.pdf.

BY DOING BUSINESS OR SEEKING TO DO BUSINESS WITH THE SAN JACINTO RIVER AUTHORITY, YOU ACKNOWLEDGE THAT YOU HAVE BEEN NOTIFIED OF THE REQUIREMENTS OF CHAPTER 176 OF THE TEXAS LOCAL GOVERNMENT CODE AND THAT YOU ARE RESPONSIBLE FOR COMPLYING WITH THEM.

28.2 Texas Government Code Section 2252.908 requires persons who enter into a contract with a government entity to submit a disclosure of interested parties (Form 1295) to the government entity or state agency at the time business entity submits the signed contract to the government entity or state agency. Use the following link to access filing instructions: https://www.ethics.state.tx.us/whatsnew/elf info form1295.htm.

29. Taxes.

Owner is exempt from payment of sales and use taxes of the State of Texas and of cities and counties thereof, on all goods and services to be incorporated into the Work. Said taxes shall not be included in the Proposal.

- 29.1. Owner will furnish the required certificates of tax exemption to Contractor for use in the purchase of goods to be incorporated into the Work.
- 29.2. Owner's exemption does not apply to construction tools, machinery, equipment, or other property purchased by or leased by Contractor, or to goods not incorporated into the Work, except to the extent the exemption referred to in paragraph 18.4 applies to the Project to exempt taxes on any such items.
- 29.3. If the Project is construction of a water or wastewater system certified by the Texas Commission on Environmental Quality as a regional system, equipment,

services and supplies used solely to construct the Project are exempted from taxes imposed by Chapter 151, Limited Sales, Excise and Use Tax, Texas Tax Code. Said taxes shall not be included in the Proposal. Owner will furnish any required certificates of tax exemption to Contractor.

30. Verification Company Does Not Boycott Israel

Pursuant to Section 2270.002 of the Texas Government Code, the Contractor shall be required to execute contemporaneous with its execution of the Standard Form of Agreement a verification that Contractor does not Boycott Israel and Contractor will not Boycott Israel during the term of this Standard Form of Agreement. "Boycott Israel" as used herein means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes.

31. Signing of Standard Form of Agreement.

SJRA's Purchasing Department will transmit to the Successful Offeror the required number of unsigned counterparts of the Standard Form of Agreement with all other written Contract Documents attached. Contractor shall deliver original, hard copies of the required number of counterparts of the Standard Form of Agreement and written Contract Documents signed by Contractor, unsigned Bond forms, evidence of insurance as set out in Section 27 above, signed disclosure of interested parties (Form 1295), signed Conflict of interest Questionnaire, and signed and notarized Verification Company Does Not Boycott Israel, to SJRA Purchasing Department ten (10) Calendar days prior to the SJRA Board of Directors Meeting for which a contract award is anticipated. Notwithstanding the foregoing, the Standard Form of Agreement may be executed using electronic signatures at the option and in the discretion of Owner, and, in such event, the provisions of the Uniform Electronic Transaction Act, Chapter 332, Texas Business and Commerce Code, as amended, and any applicable policies and procedures of Owner regarding electronic signatures shall apply. However, the requirements of this Section 31 apply regardless of whether or not the Standard Form of Agreement is also executed using electronic signatures or transmitted electronically. Following and subject to award, the Owner shall deliver one (1) fully signed counterpart of the Standard Form of Agreement to Contractor. Within three (3) Calendar days of Contractor's receipt of the fully executed Standard Form of Agreement, the Contractor shall deliver the original, hard copy fully executed Bonds to SJRA Purchasing Department.

END OF SECTION

SECTION 00 41 00.02

PROPOSAL FORM



To: <u>The San Jacinto River Authority</u>

1577 Dam Site Road

G & A Building, 3rd Floor Receptionist

Conroe, Texas 77304

Project: Lake Conroe Dam Relief Wells Rehabilitation

CSP No.: 18-0093

Project No.: SJRA Project No. LCPR0028.1003.2C001

Offeror:

(Print or type full name of proprietorship, partnership, corporation, or joint venture)

1.0 OFFER

- A. Total Proposal Price: The undersigned Offeror proposes and agrees, if this Proposal is accepted, to enter into an Agreement with Owner in the form included in the Contract Documents to perform all Work as specified or indicated in Contract Documents for the Contract Amount indicated in this Proposal or as modified by a Change Order or Change Directive.
- **B. Proposal Security:** Included with the Proposal is a Proposal Security in the amount of 5 percent of the Total Proposal Price subject to terms described in Specification Section 00 21 13.02 Instructions to Offerors.
- C. Period for Proposal Acceptance: Offeror accepts all of the terms and conditions of the Request for Proposals and Instructions to Offerors, including without limitation those dealing with the disposition of required Bonds. This offer shall remain open to acceptance and is irrevocable for 90 days after Proposal Date (opening). That period may be extended by mutual written agreement of the SJRA and Offeror.
- **D. Liquidated Damages:** Offeror accepts the provisions of the Agreement as to liquidated damages in the event of its failure to complete Work in accordance with the schedule set forth in the Agreement.
- **E. Addenda**: Offeror hereby acknowledges it has received, examined and carefully studied all Addenda and all Addenda have been considered and all related costs are included in the Total Proposal Price. Offeror hereby acknowledges receipt of the following Addenda:

Addendum No.	Addendum Date	Signature Acknowledging Receipt

- **F. Proposal Supplements:** The following documents shall be provided with the proposal:
 - Offeror's Statement of Qualifications (SOQ) (00 21 13.02).
 - Completed Certification of Proposal
 - Completed Felony Conviction Notice Form
 - Form of Business 00 45 20
 - Proposal Security (Offeror's Bond 00 43 13)
 - Resolution of Contractor (00 45 43)
 - Contractor shall also complete and submit the provided Microsoft Excel spreadsheet of the Proposal Form.
 - One (1) flash drive with a Completed Proposal with Original signatures, Statement of Qualifications (SOQ) and a full set of Financials.

G. Conflict of Interest Forms:

Conflict of Interest Forms (Form CIQ) shall be submitted under separate cover and not be included in the sealed proposal.

2.0 CONTRACT TIME 1

A. If Proposal is accepted, Contractor shall achieve Substantial Completion of the Work within 165 calendar days after the date when the Contract Time Requirements commence to run as provided in Article 2.3 of the General Conditions, and Contractor shall achieve Final Completion within 30 calendar days after the date required for Substantial Completion of the Work, subject to adjustments of Contract Time Requirements as provided in the Contract.

3.0 OFFEROR REPRESENTATIONS

- A. Offeror is familiar with and is satisfied as to all federal, state and local laws and regulations that may affect cost, progress, performance and furnishing of the Work.
- B. Offeror has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions that may affect cost, progress, performance and furnishing of the Work.
- C. Offeror has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site and (2) Hazardous Conditions identified in reports and

drawings provided to Offeror or available for Offeror review. Offeror understands that neither Owner nor Principal Architect/Engineer is responsible for the accuracy of these documents and they are not part of the Contract Documents.

- D. Offeror has obtained and carefully studied all additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions including surface, subsurface and Underground Improvements at or contiguous to the Site which may affect cost, progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Offeror, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Contract Documents to be employed by Offeror, and safety precautions and programs incident thereto.
- E. Offeror does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Proposal for performance of the Work at the Contract Amount proposed, within the Contract Time Requirements proposed and in accordance with the terms and conditions of the Contract Documents. Offeror shall make no claims against the Owner and shall bear all risk of losses, if any, resulting on account of the amount and character of the Work, or because the conditions under which the Work must be done vary or differ from conditions or information contained in the Contract Documents, or are different from what were estimated or anticipated by it.
- F. Offeror is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- G. Offeror has correlated the information known to Offeror, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.
- H. Offeror has given Owner or Principal Architect/Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Offeror has discovered in the Contract Documents, and the written resolution thereof by Principal Architect/Engineer are acceptable to Offeror.
- I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Proposal is submitted.

J. Laws to be Observed: In the performance of the Contract, the Contractor must comply with all applicable federal, state, and local laws, ordinances and regulations, including but not limited to laws concerned with labor, safety, minimum wages, and the environment. The Contractor will make himself familiar with and shall at all times observe and comply with all federal, state, and local laws, ordinances and regulations which in any manner affect the conduct of the work, and shall Indemnify and save harmless the Owner, and its representatives against any claim arising from violation of any such law, ordinance or regulation by himself or by his subcontractor or by his employees.

K. Review by Owner:

- (a) The Owner and authorized representatives, agents and employees of the Owner shall at all times have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, material invoices, books and accounting records, subcontracts, purchase orders, and all other relevant data, documents and records pertaining to this Contract.
- L. Offeror will submit written evidence of its authority to do business in the state where the Project is located with its Proposal, form 00 45 20 Form of Business.
- M. Offeror further represents that this Proposal is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Offeror has not directly or indirectly induced or solicited any other Offeror to submit a false or sham Proposal; Offeror has not solicited or induced any individual or entity to refrain from submitting a Proposal; and Offeror has not sought by collusion to obtain for itself any advantage over any other Offeror or over Owner.

4.0 DEFINED TERMS:

- A. Terms defined in this Proposal, if any, shall be for the purposes of this Proposal. Terms with initial capital letters not defined herein shall have the meaning assigned to them in the other Bid Documents or Contract Documents.
- 5.0 TOTAL PROPOSAL PRICE HAS BEEN CALCULATED BY OFFEROR, USING THE FOLLOWING COMPONENT PRICES AND PROCESS (PRINT OR TYPE NUMERICAL AMOUNTS):

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SAN JACINTO RIVER AUTHORITY

Lake Conroe Dam Relief Wells Rehabilitation CSP NO. 18-0093



A. BASE ITEMS

PROPOSAL FORM

A. BA	A. BASE ITEMS						
Item No.	Spec. Reference	Description	Qty.	Unit	Unit Price (this column controls)	Proposal Price	
1	01 71 13	Mobilization: 5% (Maximum) of total proposal price. See Specification Section 01 71 13 – Mobilization for measurement and payment. For dollars andcents per LUMP SUM.	1	LS	\$	\$	
2	35 15 53	Pre-Maintenance Inspection and Testing of Wells. For dollars andcents per WELL.	17	EA (per Well)	\$	\$	
3	35 15 53	Mechanical Cleaning, Chemical Treatment, and Development Process (Phase 1 Maintenance including chemicals up to 15 gallons per well, 255 gallons total). For dollars andcents per WELL.	17	EA (per Well)	\$	\$	
4	35 15 53	Post-Maintenance Inspection and Testing of Wells. For dollars andcents per WELL.	17	EA (per Well)	\$	\$	

01/04/2018 CSP No. 18-0093

5	35 15 53	Disinfection (Phase 2 Maintenance including chemicals up to 1.17 pounds per well, 20 pounds total). For dollars andcents per WELL.	17	EA (per Well)	\$ \$
6	35 15 53	Collection and Disposal. For dollars andcents per WELL.	17	EA (per Well)	\$ \$
7	35 15 53	Relief Well Inspection Report. For dollars andcents per LUMP SUM.	1	LS	\$ \$
8	00 61 13.13 00 61 13.16	Contractor Bonding Costs (Statutory Payment Bond and Performance Bond) For dollars andcents per LUMP SUM.	1	LS	\$ \$
A. Total Base Items:			\$ 		

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B. EXTRA UNIT PRICE ITEMS

Item No.	Spec. Reference	Description	Qty.	Unit	Unit Price (this column controls)	Proposal Price
1	01 74 23 32 92 13	Hydromulching, seeding, and restoration of all disturbed areas. For dollars andcents per HALF-ACRE.	2	Half- Acre	\$	\$
2	35 13 53	Chemical Treatment, Chemicals (LIQUID DESCALER) in excess of 255 gallons based on 15 gallons per well for 17 wells. For dollars and	128	Gallon	\$	\$
3	35 13 53	Disinfection, Chemicals (WEL-CHLOR PLUS) in excess of 20 pounds based on 1.17 pounds per well for 17 wells. For dollars andcents per 10-POUNDS.	1	10- Pounds	\$	\$
B. Total Extra Unit Price Items:				\$	1	

C. CASH ALLOWANCES (NOT USED)

D. ALTERNATE ITEMS (NOT USED)	

E. TOTAL PROPOSAL PRICE:	
(Add Totals for Items A, B, C, and D)	\$

6.0 SIGNATURES: By signing this Document, I agree that I have received and reviewed all Bid Documents, Contract Documents and Addenda and considered all costs associated with the Bid Documents, Contract Documents and Addenda in calculating the Total Proposal Price.

Offeror:_		
	(Print or type full name of your proprieto or joint venture.*)	rship, partnership, corporation,
** By:		
	Signature	Date
Name:		
	(Print or type name)	Title
	usiness as:s Address:	
	(Mailing)	
	(Street, if different)	
	(Street, it different)	
Telephor	ne and Fax Number:(Print or type r	numbers)
	() [· · · · - /

- * If Proposal is a joint venture, add additional Proposal Form signature sheets for each member of the joint venture.
- ** Offeror certifies that the only person or parties interested in this offer as principals are those named above. Offeror has not directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive Proposing.

Note: This document constitutes a Governmental record, as defined by § 37.01 of the Texas Penal Code. Submission of a false Governmental record is a criminal offense as provided in § 37.10 of the Texas Penal Code.

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7.0 CERTIFICATION OF PROPOSAL

The undersigned affirms that they are duly authorized to execute this Proposal, that this Proposal has not been prepared in collusion with any other Offeror, and that the contents of this Proposal have not been communicated to any other Offeror prior to the official opening of this Proposal. Additionally, the undersigned affirms that the Offeror is willing to sign the attached SJRA Agreement (if applicable).

Signed By:		Title:			
Typed Name:		Company Name:			
Phone No.:		Fax No.:			
Email:					
Proposal Ad	ddress: P.O. Box or Street	City	State	Zip	
Order Addre	ess: P.O. Box or Street	0:1	State		
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FELONY CONVICTION NOTIFICATION

Any person and/or business entity that enters into a contract with the San Jacinto River Authority must give advance notice to the SJRA if any employee or an owner or operator of the business entity has been convicted of a felony. The notice must include a general description of the conduct resulting in the conviction of a felony. The notice must also describe the role that the employee, owner, or operator will perform in executing the contract. The SJRA may require substitution of employees in the performance of the contract.

The SJRA may terminate a contract with a person or business entity if the SJRA determines that the person or business entity

failed to give notice as required by this clause, misrepresented the conduct resul personnel at SJRA's request.	ting in the conviction, or failed to substitute
I, the undersigned agent for the firm named below, certify that the information condbeen reviewed by me and the following information furnished is true to the best of	
Signature of Authorized Company Official	Date
Authorized Company Official's Name and Title (Printed)	
Firm Name	
A. My firm is not owned or operated by anyone who has been convicted of a felony been convicted of a felony:	y nor does it have any employees who have
Signature of Authorized Company Official	 Date
B. My firm has employee(s) or is owned or operated by the following individual(s)	who has/have been convicted of a felony:
Signature of Authorized Company Official	 Date
C. Provide a general description of the conduct resulting in the conviction of a feld	ony.
Signature of Authorized Company Official	 Date
D. Describe the role that the person(s) convicted of a felony will play in the performance of the person (s) convicted of a felony will play in the performance of the person (s) convicted of a felony will play in the performance of the person (s) convicted of a felony will play in the performance of the person (s) convicted of a felony will play in the person (s) convicted of a felony will play in the person (s) convicted of a felony will play in the performance of the person (s) convicted of a felony will play in the performance of the person (s) convicted of a felony will play in the person (s) convicted of a felony will play in the person (s) convicted of a felony will play in the person (s) convicted of a felony will play in the person (s) convicted of the person (s) conv	mance of the contract.
Signature of Authorized Company Official	Date

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Lake Conroe Dam Relief Wells Rehabilitation STANDARD FORM OF AGREEMENT SJRA Project No. LCPR0028.1003.2C001 BETWEEN OWNER AND CONTRACTOR

SECTION 00 52 00

STANDARD FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR



THIS AGREEMENT is dated as of					by ar	nd	between	the	San	
			(hereinafter	called	"OWNER")	and				
(hereinat	fter call	ed " CONT R	ÀCTOR").		,	_				

OWNER and CONTRACTOR, in consideration of the covenants hereinafter set forth, agree as follows:

Article 1. WORK.

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

Construction of Lake Conroe Dam Relief Wells Rehabilitation

Article 2. PRINCIPAL ARCHITECT/ENGINEER AND OWNER'S REPRESENTATIVE.

The project has been designed by Freese and Nichols, Inc. 10497 Town and Country Way Suite 600, Houston, TX 77024, who is hereinafter called "PRINCIPAL ARCHITECT/ENGINEER" and who assumes all duties and responsibilities and has the rights and authority assigned to PRINCIPAL ARCHITECT/ENGINEER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents. OWNER'S Representative shall be <u>Freese and Nichols, Inc.</u>

Article 3. CONTRACT TIMES. 1

The Work will be Substantially Completed within 165 **calendar days** after the date when the Contract Time Requirements commence to run as provided in Article 2.3 of the General Conditions, and CONTRACTOR shall achieve Final Completion within 30 **calendar days** of the date required for Substantial Completion.

OWNER and CONTRACTOR recognize that **time is of the essence** of this Agreement and that OWNER will suffer financial loss if the Work is not completed within the times specified in the above paragraph, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. They also recognize the delays, expense and difficulties involved in proving the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) and, as a reasonable estimate of such damages, CONTRACTOR shall pay OWNER Five Hundred Dollars (\$500.00) for each and every day of delay in CONTRACTOR achieving Substantial Completion of the Work and readiness for final payment beyond the times specified in the above paragraph. OWNER shall have the option of deducting the amount of any liquidated damages from any monies that may be owed to CONTRACTOR or to recover such amount from the CONTRACTOR or its sureties, at CONTRACTOR'S expense.

12/03/2017 CSP No. 18-0093

Article 4. CONTRACT AMOUNT.

OWNER shall pay CONTRACTOR for completion of the Work, in accordance with the Contract Documents, an amount in current funds equal to the sum of the amounts determined to be due and owing pursuant to the Proposal and any subsequent Change Orders and Change Directives thereto.

Article 5. PAYMENT PROCEDURES.

CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by OWNER'S Representative or PRINCIPAL ARCHITECT/ENGINEER as determined by the OWNER and as provided in the General Conditions and Supplemental Conditions, if any.

OWNER shall make progress payments on account of the Contract Amount on the basis of CONTRACTOR'S Applications for Payment as recommended by OWNER'S Representative or PRINCIPAL ARCHITECT/ENGINEER and in conformance with the procedures described in the General Conditions. All such payments will be measured by the schedule of values established in Article 2.4.2.07 of the General Conditions (and on the number of units of each Unit Price item completed, if unit price contract). Upon final completion and acceptance of the Work in accordance with Article 14.11 of the General Conditions, OWNER shall pay the remainder of the Contract Amount as recommended by OWNER'S Representative as provided in said Article 14.11.

The 10 percent retainage withheld pursuant to Article 14.01.5 of the General Conditions shall be deposited in an interest-bearing account, and the interest earned on such retainage shall be paid to CONTRACTOR on completion of the contract.

Article 6. CONTRACTOR'S REPRESENTATIONS.

In order to induce OWNER to enter into this Agreement CONTRACTOR makes the following representations:

CONTRACTOR has examined and carefully studied the Contract Documents (including the Addenda listed in Article 7) and the other related data identified in the Proposal Documents.

CONTRACTOR has visited the site and become familiar with and is satisfied as to the general, local, and site conditions that may affect cost, progress, performance, or furnishing of the Work.

CONTRACTOR is familiar with and is satisfied as to all federal, state, and local Legal Requirements that may affect cost, progress, performance, and furnishing of the Work.

CONTRACTOR has carefully studied all reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site. CONTRACTOR acknowledges that such reports and drawings are not Contract Documents, are not warranted or represented in any manner by Owner to accurately show the conditions at the Site, and may not be complete for CONTRACTOR'S purposes. CONTRACTOR acknowledges that OWNER and PRINCIPAL ARCHITECT/ENGINEER do not assume and expressly disclaim any responsibility for the accuracy or completeness of the information and data shown or indicated in the Contract Documents with respect to

12/03/2017

subsurface conditions or Underground Facilities at or contiguous to the Site or CONTRACTOR'S interpretation of such information and data. CONTRACTOR has obtained and carefully studied (or assumes responsibility for having done so) all such additional supplementary research, examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site or otherwise which may affect cost, progress, performance, or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto. CONTRACTOR does not consider that any additional examinations, investigations, explorations, tests, studies, or data are necessary for the performance and furnishing of the Work at the Contract Amount, within the Contract Time Requirements and in accordance with the other terms and conditions of the Contract Documents.

CONTRACTOR is aware of the general nature of work to be performed by OWNER and others at the Site that relates to the Work as indicated in the Contract Documents.

CONTRACTOR has correlated the information known to CONTRACTOR, information and observations obtained from visits to the Site, reports, and Drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.

CONTRACTOR has given PRINCIPAL ARCHITECT/ENGINEER through the OWNER or OWNER'S Representative written notice of all conflicts, errors, ambiguities, or discrepancies that CONTRACTOR has discovered in the Contract Documents and the written resolution thereof by PRINCIPAL ARCHITECT/ENGINEER is acceptable to CONTRACTOR, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

Pursuant to Section 2270.002 of the Texas Government Code, contemporaneous with CONTRACTOR's execution of this Agreement, CONTRACTOR shall execute the Verification Company Does Not Boycott Israel, attached hereto and incorporated herein.

Article 7. CONTRACT DOCUMENTS.

The Contract Documents are comprised of the following:

- 1. This Agreement.
- 2. Exhibits to this Agreement: Verification Company Does Not Boycott Israel

Document	Title	Date	Page(s)

- 3. Performance, Payment, and Maintenance Bonds.
- 4. General Conditions of the Contract.
- 5. Supplemental Conditions, if any.
- 6. Specifications 00 11 13 through 35 15 53, prepared by Freese and Nichols, Inc. and sealed on August, 14, 2018.

12/03/2017 CSP No. 18-0093

8. Addenda:

Addendum No.	Addendum Date	Signature Acknowledging Receipt
		, , , , , , , , , , , , , , , , , , ,

- CONTRACTOR'S Proposal Form pursuant to Competitive Sealed Proposal No. 18-0093.
- 10. Prevailing Wage Rates.
- 11. The following which may be delivered or issued after the Effective Date of the Agreement and are not attached thereto: All written Change Orders or Change Directives pursuant to Article 3.3 of the General Conditions.

There are no Contract Documents other than those listed in this Article. The Contract Documents may only be amended, modified, or supplemented as provided in Article 3.3 of the General Conditions.

Article 8. INDEMNITY PROVISIONS.

THE GENERAL, SPECIAL, AND SUPPLEMENTAL CONDITIONS, IF ANY, INCORPORATED INTO THIS AGREEMENT CONTAIN PROVISIONS THAT MAY RELIEVE ONE PARTY FOR RESPONSIBILITY IT WOULD OTHERWISE HAVE UNDER THE LAW FOR DAMAGES OR OTHER LIABILITY ARISING OUT OF THE WORK.

EACH OF THE PARTIES HERETO SPECIFICALLY AGREES THAT IT HAS A DUTY TO READ THIS AGREEMENT, THE GENERAL, SPECIAL, AND SUPPLEMENTAL CONDITIONS, IF ANY, AND ALL OTHER CONTRACT DOCUMENTS AND AGREES THAT IT IS CHARGED WITH NOTICE AND KNOWLEDGE OF THE TERMS OF THIS AGREEMENT AND ALL CONTRACT DOCUMENTS; THAT IT HAS IN FACT READ THIS AGREEMENT AND ALL CONTRACT DOCUMENTS AND IS FULLY INFORMED AND HAS FULL NOTICE AND KNOWLEDGE OF THE TERMS, CONDITIONS AND EFFECTS OF THIS AGREEMENT; THAT IT HAS HAD THE OPPORTUNITY TO BE REPRESENTED BY INDEPENDENT LEGAL COUNSEL OF ITS CHOICE PRECEDING ITS EXECUTION OF THIS AGREEMENT AND HAS RECEIVED OR VOLUNTARILY CHOSEN NOT TO RECEIVE THE ADVICE OF ITS ATTORNEY IN ENTERING INTO THIS AGREEMENT; AND THAT IT RECOGNIZES THAT CERTAIN TERMS OF THIS AGREEMENT AND THE CONTRACT DOCUMENTS RESULT IN ONE PARTY ASSUMING THE LIABILITY INHERENT IN SOME ASPECTS OF THE TRANSACTION AND RELIEVING THE OTHER PARTY OF ITS RESPONSIBILITY FOR SUCH LIABILITY. EACH PARTY HERETO AGREES AND COVENANTS THAT IT WILL NOT CONTEST THE VALIDITY OR ENFORCEMENT OF ANY EXCULPATORY PROVISION OF THIS AGREEMENT ON THE BASIS THAT THE PARTY HAD NO NOTICE OR KNOWLEDGE OF SUCH PROVISION OR THAT THE PROVISION IS NOT "CONSPICUOUS".

Article 9. MISCELLANEOUS.

Terms used in this Agreement which are defined in Article 1 of the General Conditions will have the meanings indicated in the General Conditions.

CONTRACTOR certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Article 9:

- 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the proposal process or in the Contract execution;
- 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the proposal process or the execution of the Contract to the detriment of OWNER, (b) to establish Proposal or Contract prices at artificial noncompetitive levels, or (c) to deprive OWNER of the benefits of free and open competition;
- 3. "collusive practice" means a scheme or arrangement between two or more Proposers, with or without the knowledge of OWNER, a purpose of which is to establish Proposal prices at artificial, non-competitive levels; and
- 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the proposal process or affect the execution of the Contract.

No assignment by a party hereto of any rights or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the Contract.

OWNER and CONTRACTOR each binds itself, its officers, directors, shareholders, partners, members, successors, assigns, and legal representatives to the other party hereto, its officers, directors, shareholders, partners, members, successors, assigns and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

Any provision or part thereof of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions or parts thereof shall continue to be valid and binding upon OWNER and CONTRACTOR, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision or part thereof.

This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement. A signed copy of this Agreement delivered by facsimile, email, or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original

12/03/2017 CSP No. 18-0093

signed copy of this Agreement. Duplicate copies of duly executed and delivered counterparts of this Agreement shall be deemed to have the same full force and effect as originals and may be relied upon as such. Notwithstanding the foregoing, OWNER and CONTRACTOR agree that this Agreement may be executed using electronic signatures at the option and in the discretion of OWNER, and, in such event, the provisions of the Uniform Electronic Transaction Act, Chapter 332, Texas Business and Commerce Code, as amended, and any applicable policies and procedures of OWNER regarding electronic signatures shall apply.

IN WITNESS WHEREOF, OWNER and CONTRAC	CTOR have signed this Agreement.
This Agreement will be effective onof the Agreement).	, (which is the effective date
OWNER: San Jacinto River Authority	
Ву:	
Attest:	
Address for giving notices:	
CONTRACTOR:	
Ву:	
(CORPORATE SEAL)	
Attest:	
Address for giving notices:	
License No.	
Agent for service of process:	

END OF SECTION

VERIFICATION COMPANY DOES NOT BOYCOTT ISRAEL

				undersigned ame],						
[Cont	ractor], and,	upon c	ath, at	fter first being o	duly sworn,	depos	sed an	d state	ed:	
of	"My name	is		[Contractor] n herein are wit	and	d I am refer	n the _ red to	in this	verification a	[title]
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[Cont				WORN TO be				ay of _		201_, by -
									State of Tex	

Project Specification Contract No. 18-0093

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12/03/2017 CSP No. 18-0093

Project Specification Contract No. 18-0093

SECTION 35 15 53

RELIEF WELL MAINTENANCE



PART 1 - GENERAL

1.1 SUMMARY

- A. The Contractor shall furnish all labor, materials, equipment, chemicals, instrumentation, and incidentals necessary to inspect, test, mechanically clean, chemically treat, and develop seventeen (17) relief wells to reduce head losses and improve their performance. The wells shall be mechanically cleaned, chemically treated, and re-developed to remove sediment, sludge, bacterial slime, mineral encrustation and clogging. The Contractor shall document the Work, including measurements of water level, flow rate and specific capacity, and video inspection, of each well, before and after mechanical cleaning and chemical treatment. The Work shall also include disinfection of the relief wells, testing, collection and disposal of all debris, sediment, chemicals, and discharge water, and reporting.
- B. Relief well maintenance shall be performed on relief wells numbered: 1, 2, 3, 4, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 19, and 20. Relief wells numbered 5, 10, and 18 were completed under a previous pilot test program.
- C. Related Specification Sections include, but are not limited to:
 - 1. Division 00 Proposal Requirements, Contract Forms and Conditions of the Contract.
 - 2. Division 01 General Requirements.

1.2 MEASUREMENT AND PAYMENT

- A. Pre-Maintenance Inspection and Testing: Stipulated Price (Each) per relief well.
- B. Mechanical Cleaning, Chemical Treatment, and Development Process (Phase 1 Maintenance including chemicals): Stipulated Price (Each) per relief well.
 - Measurement shall be made per relief well for all labor, equipment, chemicals and other materials, not otherwise specified, for Mechanical Cleaning, Chemical Treatment, and Development Process (Phase 1 Maintenance including chemicals <u>up to 15 gallons per well</u>).
 - 2. Payment shall be made for Mechanical Cleaning, Chemical Treatment, and Development Process (Phase 1 Maintenance including chemicals <u>up</u> to 15 gallons per well), completed as part of the Work on a per relief well basis.

- 3. Based on the chemical treatment specified herein and the anticipated relief well and filter pack chemical solution requirements, up to 15 gallons of chemicals (LIQUID DESCALER) may be required for each well.

 Chemical Treatment Chemicals (LIQUID DESCALER) in excess of a total of 255 gallons, based on 15 gallons per well for 17 wells, are measured and paid for, upon prior approval of the Owner's Representative, under Section 1.2.G. Chemical Treatment Chemicals (LIQUID DESCALER) in excess of 255 gallons. Obtain Owner's Representative's approval prior to using more than 15 gallons of Chemical Treatment Chemical on any individual well.
- C. Disinfection (Phase 2 Maintenance including chemicals): Stipulated Price (<u>Each</u>) per relief well.
 - 1. Measurement shall be made per relief well for all labor, equipment, chemicals, and other materials, not otherwise specified, for Disinfection (Phase 2 Maintenance including chemicals up to 1.17 pounds per well).
 - 2. Payment shall be made for Disinfection (Phase 2 Maintenance including chemicals <u>up to 1.17 pounds per well</u>), completed as part of the Work on a per relief well basis.
 - 3. Based on the disinfection specified herein and the anticipated relief well and filter pack disinfection requirements, up to 1.17 pounds of chemicals (WEL-CHLOR PLUS) may be required for each well. Disinfection Chemicals (WEL-CHLOR PLUS) in excess of 20 pounds, based on 1.17 pounds per well for 17 wells, are measured and paid for, upon prior approval of the Owner's Representative, under Section 1.2.H. Disinfection Chemicals (WEL-CHLOR PLUS) in excess of 20 pounds. Obtain Owner's Representative's approval prior to using more than 1.17 pounds of Disinfection Chemical on any individual well.
- D. Post-Maintenance Inspection and Testing, Post-Mechanical Cleaning, Chemical Treatment, and Development Process: Stipulated Price (<u>Each</u>) per relief well.
- E. Collection and Disposal: Stipulated Price (Each) per relief well.
- F. Relief Well Inspection Report: Stipulated Price (Lump Sum).
- G. Chemical Treatment Chemicals (LIQUID DESCALER) in excess of 255 gallons. Obtain Owner's Representative's approval prior to using more than a total of 255 gallons based on 15 gallons per well for 17 wells. Payment for Chemical Treatment Chemicals (LIQUID DESCALER) in excess of 255 gallons shall be on a per gallon basis.
- H. Disinfection Chemicals (WEL-CHLOR PLUS) in excess of 20 pounds. Obtain

- Owner's Representative's approval prior to using more than a total of 20 pounds based on 1.17 pounds per well for 17 wells. Payment for Disinfection Chemicals (WEL-CHLOR PLUS) in excess of 20 pounds shall be on a per pound basis.
- 1. The chemical quantities described above in paragraphs A-H under Section 1.2, and in Specification Section 00 41 00.02 Proposal Form, are based on the chemicals specified in this Specification Section 35 15 53 Relief Well Maintenance. If, subsequent to contract award, the Contractor elects to submit substitute products in accordance with Specification Section 01 25 13 Product Substitutions, then Contractor must provide documentation for equivalent chemical quantities of substitute products for approval by the Owner's Representative.

1.3 QUALITY ASSURANCE

- A. Maintenance Contractor: The relief well maintenance shall be performed by a Contractor with at least 10 years of experience in the installation, inspection and testing, mechanical cleaning, and chemical treatment of relief wells or similar water wells. Contractor's experience shall include the safe handling and use of the chemicals used for the Work. Documentation of this experience, along with a minimum of three references and their contact information, shall be submitted by Contractor for approval by the Owner and the Principal Architect / Engineer.
- B. Records of Maintenance: The testing and maintenance of each well and appurtenances shall be recorded on a relief well inspection report form submitted for approval by the Principal Architect / Engineer. Relief Well Inspection Report forms are attached (Appendix A, Supplemental Information Packet). Contractor shall submit any proposed changes to Relief Well Inspection Report forms to the Principal Architect / Engineer for approval.
- C. Maintenance and Protection: Maintain and protect the relief wells from damage throughout the duration of Work. Damage found to the relief wells prior to the initiation of work must be reported to the Owner and Principal Architect / Engineer in accordance with the contract documents. Damaged elements may require repair prior to Work to prevent further damage to the system. Repair methods and costs shall be agreed upon and negotiated to the satisfaction of the Principal Architect / Engineer and Owner, prior to beginning repairs.
- D. Inspection: The Principal Architect / Engineer and / or Owners Representative will observe the Work on a full or part-time basis as necessary and shall be notified by the Contractor at least one (1) week prior to beginning any Work.
- E. Depth/Elevation Control: All depth readings shall be measured from the top of

the manhole or vault opening rim for each relief well. When necessary, place a straight-edge across the opening to use as a datum for measurements.

1.4 SUBMITTALS

- A. Prior to commencing Work, contractor shall submit the following for review and approval by the Owner and the Principal Architect / Engineer:
 - 1. A detailed Work plan, to be submitted for approval at least one week before the start of work. The Work plan shall include planned procedures and equipment used to perform the specified well maintenance activities. The Work plan shall detail all facets of the proposed Work, including but not limited to: equipment, procedures, sequence of Work, chemicals and concentrations to be used, methods for onsite preparation and control of water, relief well inspection report forms, and schedule. The plan shall include details of proposed on-site chemical storage and disposal of all chemicals, sediment, sludge, debris, and other materials produced during the Work.
 - 2. Proposed equipment and procedures for obtaining audio and video documentation of the entire length of the riser pipe and screened sections of each well, before and after the maintenance activities. All files shall be delivered in digital format and shall be of a high enough resolution to allow for the capture of print-quality images for inclusion in reports.
- B. Upon completion of the Work, contractor shall submit a maintenance report, with written documentation of all activities, including pre- and post-maintenance water levels, flow rates, and specific capacity of each relief well. All reports shall include the elevation at the top of each manhole.
- C. See Specification Section 01 33 00 Submittals for requirements for the mechanics and administration of the submittal process.

1.5 OWNER-SUPPLIED ITEMS

- A. Owner shall provide the Contractor with the following:
 - 1. Record drawings for the relief well system (Appendix A, Supplemental Information Packet).
 - 2. Relief Well Inspection Summary Data (Appendix A, Supplemental Information Packet).
 - 3. Water Quality Test Results (Appendix A, Supplemental Information Packet).
 - 4. On-site source for potable or suitable non-potable water for use by the Contractor in performing relief well maintenance activities. The supplied water may require treatment including the addition of chlorine by the

Contractor to prevent introduction of undesirable bacteria.

PART 2 - PRODUCTS

2.1 EQUIPMENT

- A. All equipment and tools necessary to accomplish the relief well maintenance and any required testing shall be provided by the Contractor.
- B. Prior to commencing Work, all equipment, including implements, tools and measurement devices used at or in the well system must be cleaned and disinfected with a chlorine solution. This includes all pumps, piping, hoses and valves. The disinfectant solution shall not be less than 100 ppm, which is equivalent to 1 pound of chlorine to 1,200 gallons of potable water (This concentration can usually be obtained by adding two gallons of Chlorox bleach to 1000 gallons of water). All of the equipment shall be cleaned and disinfected on the project site before use and shall also be re-cleaned and disinfected whenever contamination may have occurred and before being transferred to another well.

2.2 CHEMICALS

- A. LIQUID DESCALER by Cotey Chemical, or approved equal.
- B. WEL-CHLOR PLUS by Cotey Chemical, or approved equal.
- C. Sodium hypochlorite, lime, and soda ash from local sources.
- D. NW 500 Chlorout from Johnson Screens, or approved equal.
- E. Chemicals provided from other suppliers may be proposed for approval. To ensure compatibility, a full set of chemicals offered by the same supplier or manufacturer is preferred.
- F. Submit any requests for substitutions in accordance with Specification Section 01 25 13 Product Substitutions.
- G.Only potable water or suitable disinfected non-potable water shall be used for batching of chemical mixtures. Potable water or suitable non-potable water will be provided by the Owner.

PART 3 - EXECUTION

3.1 GENERAL

- A. Relief well maintenance is defined as the cleaning, development and disinfection of the system. Work for each well shall proceed as follows:
 - 1. Pre-maintenance activities: Includes inspection, sounding, measurement of water level, artesian flow rate and specific capacity, video inspection, and pump testing.

- 2. Phase 1 Maintenance: Includes mechanical cleaning, chemical treatment, development activities, and removal of all debris and residual chemicals.
- 3. Phase 2 Maintenance: Includes disinfection activities.
- 4. Post-maintenance activities: Includes sounding, measurement of water level, artesian flow rate and specific capacity, pump testing, video inspection, and collection and disposal.
- 5. Maintenance activities including testing, mechanical cleaning, and chemical treatment can be conducted at more than one well location at a time, provided that activities shall not be conducted simultaneously any closer than every third (3rd) well.

3.2 PRE-MAINTENANCE INSPECTION AND TESTING

A. Measurement and Inspection

- 1. Pre-maintenance activities shall include measurement of static and flowing water level, measurement of the artesian flow rate, sounding the depth and condition of the bottom of the well, and down-hole video inspection.
- 2. Flow rate may be measured by bailing or pumping below the normal discharge level and then recording the water level change with time as it rises towards a static level in a temporary riser extension, or other approved method. Water level may be measured with a water level indicator (WLI) or pressure transducer and data logger.
- 3. Depth shall be sounded with a fiberglass measuring tape weighted with a steel rod. Record total depth, depth to any sediment, bottom condition, and any discrepancy from expected depth. Sounding of well depth shall occur prior to maintenance and be compared to well as-built records.
- 4. Video inspect and record the full circumference and entire length of the screen and riser with a suitable camera. Make audio recordings and written notes of observations made during the inspection, with reference to specific depths and locations. If necessary, perform the video inspection after removal of any debris, slime, or sludge that may interfere with the inspection.
- 5. If there is a significant amount of filter sand within the well, possibly indicating damage to the well screen, suspend work on the well and report the findings to the Principal Architect / Engineer. If well has remained reasonably clean, proceed as specified below.
- 6. Determine the specific capacity by pumping as described below.

B. Pre-Maintenance Testing:

1. General Pre-Maintenance Testing shall include halting the artesian flow.

- measurement of static water level, measurement of the artesian flow rate, and pump testing to determine pre-maintenance specific capacity.
- 2. Remove the check valve. Measure from the top of the manhole to the water level at the top of the riser to establish the elevation of the flowing water. Attach a 6-inch diameter PVC riser extension with watertight coupler long enough to reach from well riser to at least one foot above the top of the manhole and allow the water to reach its static level. Allow at least 20 minutes for the water level to become reasonably stable. Provide support to prevent lateral and upward movement of the extension. Suspend a PVC pipe at least 40 feet long in the well to facilitate water level measurement with the water level indicator (WLI). Measure the static water level. Bail or pump the relief well to lower the water level to at least 2 feet below the lower of the static water level or the top of the well riser and allow the water to rise (recover) in the riser and riser extension. Record water level changes versus elapsed time at frequent intervals until the water level reaches within 3 inches of the static level. The recorded water level versus time shall be plotted and used to calculate the flow rate under normal conditions.
- 3. Test the well production by pumping at a constant discharge rate for at least 30 minutes and measuring the discharge flow rate and water level every 10 minutes. The pumping rate shall produce a drawdown of at least 20 feet from the static level or a discharge of at least 20 GPM, whichever occurs first. If the water level drops too low and suction is lost, reduce the pumping rate, wait until the water level rises within 2 feet of the static level, and re-start the test. Use the same pumping rate and duration for testing after maintenance at each well for accurate comparison of specific capacity and well efficiency, i.e., attempt to produce 20 feet of drawdown or a pumping rate of 20 GPM (or some other approved effective rate) within 30 minutes. The intent is to be able to use specific capacity as the comparison for the wells to the initial specific capacity at the time the well was constructed and to measure effectiveness of the cleaning process. Report pumping duration, discharge, drawdown, and specific capacity for each observation.
- 4. If the thickness of sediment in the well exceeds 2 inches, remove all solid material from the bottom of the well with an air lift or a semi-trash pump with a long suction line.

3.3 MECHANICAL CLEANING, CHEMICAL TREATMENT, AND DEVELOPMENT PROCESS (PHASE 1 MAINTENANCE)

A. General

1. The Contractor shall clean and treat each relief well using approved

- methods to remove clogging deposits and clean the filter pack and the formation walls to produce the maximum feasible yield of water per foot of drawdown. At the time of cleaning, treatment, and re-development of any relief well, the well shall be free of drawdown due to pump testing, developing or activity at another location.
- 2. The Contractor shall be responsible for maintaining the needed access, work area, and clearance near the relief well necessary to accomplish cleaning. The Contractor shall furnish, install, or construct the necessary discharge lines to transfer and dispose of the discharge water into a containment tank. Mechanical cleaning and chemical treatment shall be conducted to achieve a stable well of maximum efficiency. If, at any time during the cleaning and re-development process it becomes apparent that the well may be damaged, work shall be immediately terminated. The Principal Architect / Engineer may require a change in method if the method selected does not accomplish the desired results. Any changes in means and methods shall have prior approval by the Principal Architect / Engineer.
- 3. Remove sediment, sludge, mineral and biological accumulation prior to the start of and upon completion of Phase 1 Maintenance activities, and as needed, upon completion of Phase 2 Maintenance activities.
- 4. Prior to use at each well, all tools, rods, pumps, surge blocks, brushes and any equipment may that come into contact with the well or treatment water shall be washed and sterilized with a chlorine solution. The disinfectant solution shall not be less than 100 ppm.

B. Phase 1 Maintenance Process

- 1. Measure and record pH and water temperature of the wells to monitor water condition at frequent intervals throughout the maintenance process.
- 2. Extend or replace the riser extension as needed with 6-inch PVC pipe sufficient to accommodate the static head and halt flow plus a freeboard of between 5 and 7 feet to allow for adding chemical solutions. Observe the interior of the manhole for boiling and loss of filter sand. If this occurs, block the discharge pipe with a pipe plug to halt flow and let the water rise in the riser extension. If the water begins to overflow the riser extension, install a siphon or pump to carry the water away from the Work area, but do not draw down the water level more than 3 feet below the top of the well riser pipe.
- 3. Provide a double or triple brush assembly slightly larger than the inside diameter of the screen to provide a vigorous brushing action to remove mineral deposits and scale. Brush the interior of the riser pipe and screen,

brushing each 5-foot increment of length for at least 5 minutes. Pump water from the well while brushing to help bring debris into the well for removal. Sound the well to determine the amount of sediment that has accumulated. Remove debris and sediment using a bailer, pump, or airlift until the discharge is clean, but for not less than 15 minutes.

- 4. Insert Phase 1 Maintenance chemical treatment into each well, as follows:
 - a. The wells will be treated with chemicals that are intended to remove mineral deposits and kill bacteria while breaking down the biofilm. The chemicals shall remain in the well for a minimum 32 hours and be agitated for two hours every 4 hours (i.e. agitate 2 hours, wait 4 hours, agitate 2 hours, etc.) over a 32 hour period. LIQUID DESCALER by Cotey Chemical, or approved equal shall be used. Ten (10) gallons of LIQUID DESCALER shall be used per 100 gallons of water. Other products shall be proportioned and mixed per the manufacturer's directions. Prepare a solution of water and chemicals at the ground surface in a vessel of appropriate size; first add water then chemicals per the manufacturer's guidelines.
 - b. Place the acid solution into the well with a jetter, beginning at the bottom and working slowly towards the top. Water may be removed at the top of the well until acid solution begins to appear as determined by pH testing. Slow the injection as necessary to avoid overflowing the riser extension and allow the solution to be forced into the filter pack and formation. Raise the jetter at a rate intended to reach the top of the riser at about the same time at least 100 gallons of acid solution has been placed into the well. Mix the acid solution in the well and test the pH. Add acid solution as needed to maintain the pH below 3.0 during treatment.
 - c. Agitate the solution and work it into the filter pack with a double surge block, working 3 to 4 feet of screen at a time, beginning at the top. The surge block shall contain metal or wooden plates on each end and in the middle with rubber gaskets sandwiched between the plates. The gaskets shall be no more than 1/8th-inch smaller in diameter than the well screen internal diameter. The plates shall be 1 inch smaller in diameter than the internal diameter of the well screen. The surge block shall be of sufficient weight to displace well water into the well filter pack and formation during its descent through the well using only the weight of the surge block as the driving force. A minimum weight of 150 pounds shall be used.
 - d. Begin surge block action slowly at 0.5 to 1 feet per second (fps) to blend chemical solution into the filter pack. Gradually increase speed

- up to 3 fps. The downward stroke shall match or exceed the upward stroke, including speed and length. Surge the well for 1 to 3 minutes (2 average) per foot of screen, and 0.5 to 1 minute per foot of riser pipe. During surging, pause every 10 minutes and add sufficient acid solution to raise the water level in the well at least 3 feet in order to force the acid solution into the filter pack.
- e. Test the solution in the well after initial surging and add acid solution as necessary to maintain the pH below 3.0. Agitate to distribute the acid solution evenly through the well for 2 hours, then let stand for $\underline{4}$ hours.
- f. Surge again as specified above. Test the pH and add acid solution as necessary to maintain the pH below 3.0. Repeat the process described in paragraphs <u>c</u>, <u>d</u>, <u>and e</u> above. At the end of the workday, test and add acid solution as necessary, then let the solution remain in the well overnight; do not allow the well to discharge flow.
- g. On the second day, surge and brush the well again for <u>2</u> hours. Test the solution in the well and add acid solution as necessary to maintain the pH below 3.0. Let the solution remain in the well for <u>4</u> hours, and then surge and brush the well again as specified. Repeat the process described in paragraphs c, d, and e above, until chemicals have remained in the well for a minimum 32 hours. Sound the well to determine the quantity of sediment that has accumulated, then pump and contain the solution from the well. Contain all water pumped until the pH is 6.5 or greater. Additional water removed may be discharged onto SJRA property at approved locations if the pH is above 6.5. Continue to pump the well until the pH becomes constant.
- h. <u>Clean and remove debris, sediment, and solids from the bottom of the well with an airlift, bailer, or pump.</u> Collect and dispose of all solids and associated water per 3.6 COLLECTION AND DISPOSAL.

3.4 DISINFECTION (PHASE 2 MAINTENANCE)

A. A chlorine solution shall be prepared and used for disinfection. The chlorine solution shall be prepared by first adjusting the pH with an acid or with a suitable acid product such as WEL-CHLOR PLUS by Cotey Chemical, or approved equal. Mix the solution according to manufacturer's dosage recommendations. (WARNING: This must be done in a well-ventilated area out in the open as chlorine gas can be produced. Contractor shall take all necessary precautions. Be careful not to expose any persons to chlorine gas that is given off.) The sterilization process shall be accomplished using a chlorine solution with a strength between 100 and 200 ppm, depending upon the acid product selected.

- B. Place the prepared chlorine solution into the well, with the use of a jetter, adding it first at the bottom and releasing more solution as the line is raised. Remove water at the top of the riser extension with a pump or siphon until the chlorine solution (greater than 100 ppm) appears, and contain the excess water. Fill until the chlorine concentration at the top of the well becomes constant. Agitate and surge the solution into the filter pack or immediate zones around the well using a double surge block as above for Phase 1 maintenance. Spend one to three minutes for every foot of well screen. Cleaning and disinfection shall also be performed above the screen to disinfect the riser surfaces. Continue adding the chlorine solution in minimum 10-gallon charges throughout the day as it is accepted by the well to maintain between 100 and 200 ppm in the well.
- C. Let the solution stand in the well for a minimum 8 hours. At intervals no longer than 4 hours, agitate the solution in the well with a <u>surge</u> block, test the chlorine concentration, and add chlorine solution as needed. After the 8-hour standing interval, surge or jet for one-half the original time and pump out the solution starting just below the static water level moving downward in even increments toward the well bottom; the more vigorous the evacuation the better. Remove and contain the well water until no chlorine is detected, but total volume discharged shall equal at least 20 standing well volumes (about 1500 gallons). Neutralize the removed well water using about one half pound (0.5 pounds) of NW 500 Chlorout or approved equal as needed until the pH is 6.5 or greater. Test the chlorine concentration as needed. Water with less than 2.0 parts per million of chlorine may be disposed on the ground surface.
- D. <u>Clean and remove debris</u>, <u>sediment</u>, <u>and solids from the bottom of the well</u> <u>with an airlift</u>, <u>bailer</u>, <u>or pump</u>. <u>Collect and dispose of all solids and associated water per Section 3.6 COLLECTION AND DISPOSAL</u>.
- E. Allow the water level in the well to stabilize for at least one hour, then perform 3.5 POST-MAINTENANCE INSPECTION AND TESTING to determine the flow rate and specific capacity.

3.5 POST-MAINTENANCE INSPECTION AND TESTING

A. Perform Post-Maintenance Inspection and Testing as per 3.2 PRE-MAINTENANCE INSPECTION AND TESTING above.

3.6 COLLECTION AND DISPOSAL

- A. Collect all debris and sediment removed from wells, chemicals, and incidental trash from performing work, and dispose of legally in an approved landfill.
- B. Well water and treatment water with pH between 6.5 and 7.5, residual chlorine less than 2.0 parts per million, and no other detectable chemicals may be disposed on the ground surface in locations approved by SJRA. Water with

stronger concentrations may be neutralized using approved products and disposed of on the ground surface in locations approved by SJRA or disposed of legally in an approved facility.

3.7 REPORTS

- A. Records shall be kept daily during the maintenance program. A comprehensive report of the relief well maintenance shall be provided upon completion of the Work. The final report shall provide sufficient detail to document the process involved at each relief well for the entirety of testing and mechanical cleaning, chemical treatment, and disinfection. The report will be used to track the condition of the relief wells with time after each maintenance cycle. Report shall include relief well inspection report forms, as submitted by the Contractor and approved by the Principal Architect / Engineer.
- B. Items to be documented shall include, but not be limited to
 - 1. Relief well flow rate and specific capacity, before and after Phase 1 and Phase 2 maintenance activities.
 - 2. Measurements made in the wells.
 - Record treatment chemicals, concentrations, quantities, chemical applications, duration of treatments, and measurements of pH and chlorine. Documentation of testing equipment calibrations shall be included.
 - 4. Disposal of chemicals, sediment, sludge and other waste material generated.

END OF SECTION