

WILLIAMSON COUNTY
CONTRACT FOR PROFESSIONAL SERVICES

FIRM: LRE Water, LLC (“Firm” or “LRE Water”)
ADDRESS: 1101 Satellite View #301, Round Rock, Texas 78665
PROJECT: Williamson County Groundwater Services Relating to the Trinity Aquifer within Williamson County East of I-35 – RFQ#23RFSQ79 (“Project”)

THE STATE OF TEXAS §
§
COUNTY OF WILLIAMSON §

THIS CONTRACT FOR PROFESSIONAL SERVICES (“Contract”) is made and entered into, effective as the date of the last party’s execution hereinbelow, by and between Williamson County, Texas, a political subdivision of the State of Texas, whose offices are located at 710 Main Street, Suite 101, Georgetown, Texas, 78626 (hereinafter referred to as “County”), and Firm, and such Contract is for the purpose of contracting for professional services described herein.

RECITALS:

WHEREAS, V.T.C.A., Local Government Code §262.024(a)(4) sets forth that a contract for the purchase of a professional service is exempt from the requirement established by Local Government Code Section 262.023 (Competitive Requirements for Certain Purchases) if the commissioners court by order grants the exemption; and

WHEREAS, in addition to the Williamson County Commissioners Court exempting the Professional Services subject of this Contract as professional services in accordance with Local Government Code §262.024(a)(4), County conducted a Request for Qualifications process requesting that firms submit and demonstrate such firm’s competence and qualifications in relation to the Professional Services subject of this Contract;

WHEREAS, Firm submitted its qualifications in response to County’s Requests for Qualifications and County selected Firm to provide the Professional Services and County and Firm now desire to document their agreement concerning the requirements and respective obligations of the parties; and

NOW, THEREFORE, WITNESSETH:

That for and in consideration of the mutual promises contained herein and other good and valuable considerations, and the covenants and agreements hereinafter contained to be kept and performed by the respective parties hereto, it is agreed as follows:

ARTICLE 1
CONTRACT DOCUMENTS AND APPLICABLE PROJECT DOCUMENTS

A. Contract Documents. The Contract Documents consist of this Contract, any exhibits attached hereto (which exhibits are hereby incorporated into and made a part of this Contract), any fully executed Work Authorizations; any fully executed Supplemental Work Authorizations and all fully executed Contract Amendments (as defined herein in Article 14) which are subsequently issued. These form the entire contract, and all are as fully a part of this Contract as if attached to this Contract or repeated herein.

B. Project Documents. In addition to any other pertinent and necessary Project documents, the following documents shall, to the extent applicable to the Professional Services, be used in the development of the Project:

- A. National Environmental Policy Act (NEPA)
- B. 2012 Edition of the Texas Accessibility Standards (TAS) regarding the Elimination of Architectural Barriers Program, including latest revisions (see 16 Tex. Admin. Code § 68.100; see also Tex. Gov't Code, Ch. 469), including latest revisions
- C. Americans with Disabilities Act (ADA) Regulations
- D. U.S. Army Corps Regulations
- E. International Building Code, current edition as updated
- F. Williamson County Design Criteria & Project Development Manual, latest edition

ARTICLE 2
NON-COLLUSION; DEBARMENT; AND FINANCIAL INTEREST PROHIBITED

A. Non-collusion. Firm warrants that he/she/it has not employed or retained any company or persons, other than a bona fide employee working solely for Firm, to solicit or secure this Contract, and that he/she/it has not paid or agreed to pay any company or Firm any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon or resulting from the award or making of this Contract. For breach or violation of this warranty, County reserves and shall have the right to annul this Contract without liability or, in its discretion and at its sole election, to deduct from the contract price or compensation, or to otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee.

B. Debarment Certification. Firm must sign the Debarment Certification enclosed herewith as **Exhibit A**.

C. Financial Interest Prohibited. Firm covenants and represents that Firm and its

officers, employees, agents, consultants and subcontractors will have no financial interest, direct or indirect, in the purchase or sale of any product, materials or equipment that will be recommended or required for the construction of the Project.

ARTICLE 3

PROFESSIONAL SERVICES

Firm shall perform Professional Services as identified in **Exhibit B** entitled “Professional Services.”

County will prepare and issue Work Authorizations, in substantially the same form identified and attached hereto as **Exhibit C** and entitled “Work Authorization No. _____”, to authorize the Firm to perform one or more tasks of the Professional Services. Each Work Authorization will include a description of the work to be performed, a description of the tasks and milestones, a work schedule for the tasks, definite review times by County and Firm of all Professional Services and a fee amount agreed upon by the County and Firm. The amount payable for a Work Authorization shall be supported by the estimated cost of each work task as described in the Work Authorization. The Work Authorization will not waive the Firm’s responsibilities and obligations established in this Contract. The executed Work Authorizations shall become part of this Contract.

All work must be completed on or before the date specified in the Work Authorization. The Firm shall promptly notify the County of any event which will affect completion of the Work Authorization, although such notification shall not relieve the Firm from costs or liabilities resulting from delays in completion of the Work Authorization. Should the review times or Professional Services take longer than shown on the Work Authorization, through no fault of Firm, Firm may submit a timely written request for additional time, which shall be subject to the approval of the County. Any changes in a Work Authorization shall be enacted by a written Supplemental Work Authorization before additional costs may be incurred. Any Supplemental Work Authorization must be executed by both parties within the period specified in the Work Authorization.

ARTICLE 4

CONTRACT TERM

A. Term. The Firm is expected to complete the Professional Services described herein in accordance with the above-described Work Authorizations or any Supplemental Work Authorization related thereto. If Firm does not perform the Professional Services in accordance with each applicable Work Authorization or any Supplemental Work Authorization related thereto, then County shall have the right to terminate this Contract as set forth below in Article 20. So long as the County elects not to terminate this Contract, it shall continue from day to day until such time as the Professional Services are completed in accordance with each applicable Work Authorization, or any Supplemental Work Authorization related thereto. Any Professional Services performed or costs incurred after the date of termination shall not be eligible for reimbursement. Firm shall notify County in writing as soon as possible if he/she/it determines, or

reasonably anticipates, that the Professional Services will not be completed in accordance with an applicable Work Authorization, or any Supplemental Work Authorization related thereto.

B. Work Authorizations. Firm acknowledges that each Work Authorization is of critical importance and agrees to undertake all reasonably necessary efforts to expedite the performance of Professional Services required herein so that construction of the Project will be commenced and completed as scheduled. In this regard, and subject to adjustments in a particular Work Authorization, as provided in Article 3 herein, Firm shall proceed with sufficient qualified personnel and consultants necessary to fully and timely accomplish all Professional Services required under this Contract in a professional manner.

C. Commencement of Professional Services. After execution of this Contract, Firm shall not proceed with Professional Services until Firm has been thoroughly briefed on the scope of the Project and has been notified in writing by the County to proceed, as provided in Article 8.

ARTICLE 5

COMPENSATION AND EXPENSES

County shall pay and Firm agrees to accept up to the amount shown below as full compensation for the Professional Services performed and to be performed under this Contract. The basis of compensation for the services of principals and employees engaged in the performance of the Professional Services shall be based on the Rate Schedule set forth in the attached **Exhibit D**.

The maximum amount payable under this Contract, without modification, is **Seven Hundred Ninety-Four Thousand and Ninety-Two Dollars (\$794,092.00)** (the "Compensation Cap"), provided that any amounts paid or payable shall be solely pursuant to a validly issued Work Authorization or any Supplemental Work Authorization related thereto. In no event may the aggregate amount of compensation authorized under Work Authorizations and Supplemental Work Authorizations exceed the Compensation Cap. The Compensation Cap shall be revised equitably only by written Contract Amendments executed by both parties in the event of a change the overall scope of the Professional Services set forth in **Exhibit B**, as authorized by County.

The Compensation Cap is based upon all labor and non-labor costs estimated to be required in the performance of the Professional Services provided for under this Contract. Should the actual costs of all labor and non-labor costs rendered under this Contract be less than the above stated Compensation Cap, then Firm shall receive compensation for only actual fees and costs of the Professional Services actually rendered and incurred, which may be less than the above stated Compensation Cap.

The Compensation Cap herein referenced may be adjusted for Additional Professional Services requested and performed only if approved by a written Contract Amendment signed by both parties.

Firm shall prepare and submit to County monthly progress reports in sufficient detail to support the progress of the Professional Services and to support invoices requesting monthly payment. The format for such monthly progress reports and invoices must be in a format acceptable

to County. Satisfactory progress of Professional Services shall be an absolute condition of payment.

Firm shall be reimbursed for actual non-labor and subcontract expenses incurred in the performance of the services under this Contract in accordance with the Williamson County Vendor Reimbursement Policy set forth under **Exhibit E**. Invoices requesting reimbursement for costs and expenditures related to the Project (reimbursables) must be accompanied by copies of the provider's invoice and comply with the Williamson County Vendor Reimbursement Policy. The copies of the provider's invoice must evidence the actual costs billed to Firm without mark-up.

ARTICLE 6

METHOD OF PAYMENT

Payments to Firm shall be made while Professional Services are in progress. A monthly progress report, as referenced in Article 5 above (in a form acceptable to the County), shall be submitted to Williamson County Department of Infrastructure, to the attention of the Sr. Director of Infrastructure. Such progress report shall provide a summary of the work accomplished during the billing period for each Work Authorization task with an estimated percentage of completion for the task.

Simultaneous with submission of such progress report, Firm shall prepare and submit one (1) original of a certified invoice to the Director of Road & Bridge in a form acceptable to the County Auditor. All invoices submitted to County must, at a minimum, be accompanied by an original complete packet of supporting documentation and time sheets detailing hours worked by staff persons with a description of the work performed by such persons. For Additional Professional Services performed pursuant to this Contract, a separate invoice or itemization of the Additional Professional Services must be presented with the same aforementioned requirements.

Payments shall be made by County based upon Professional Services actually provided and performed.^a Upon timely receipt and approval of each statement, County shall make a good faith effort to pay the amount which is due and payable within thirty (30) days of the County Auditor's receipt. County reserves the right to reasonably withhold payment pending verification of satisfactory Professional Services performed. Firm has the responsibility to submit proof to County, adequate and sufficient in its determination, that tasks of an applicable Work Authorization or any Supplemental Work Authorization related thereto were completed.

The certified statements shall show the total amount earned to the date of submission and shall show the amount due and payable as of the date of the current statement. Final payment does not relieve Firm of the responsibility of correcting any errors and/or omissions resulting from its negligence.

Upon submittal of the initial invoice, Firm shall provide the County Auditor with an Internal Revenue Form W-9, Request for Taxpayer Identification Number and Certification that is complete in compliance with the Internal Revenue Code, its rules and regulations.

^a See also, Art. 32(P) "Termination of Work Authorization".

ARTICLE 7

PROMPT PAYMENT POLICY

In accordance with Chapter 2251, V.T.C.A., Texas Government Code, payment to Firm will be made within thirty (30) days of the day on which the performance of services was complete, or within thirty (30) days of the day on which the County Auditor receives a correct invoice for services, whichever is later.

Firm may charge a late fee (fee shall not be greater than that which is permitted by Texas law) for payments not made in accordance with this prompt payment policy; however, this policy does not apply in the event:

- A. There is a bona fide dispute between County and Firm concerning the supplies, materials, or equipment delivered or the services performed that causes the payment to be late; or
- B. The terms of a federal contract, grant, regulation, or statute prevent County from making a timely payment with federal funds; or
- C. There is a bona fide dispute between Firm and a subcontractor/subconsultant or between a subcontractor/subconsultant and its supplier concerning supplies, materials, or equipment delivered or the Professional Services performed which causes the payment to be late; or
- D. The invoice is not submitted to Williamson County^b in strict accordance with instructions, if any, on the purchase order, or this Contract or other such contractual agreement.

The County Auditor shall document to Firm the issues related to disputed invoices within ten (10) calendar days of receipt of such invoice. Any non-disputed invoices shall be considered correct and payable per the terms of Chapter 2251, V.T.C.A., Texas Government Code.

ARTICLE 8

COMMENCEMENT OF PROFESSIONAL SERVICES

The Firm shall not proceed with any task of the Professional Services until Firm has been thoroughly briefed on the scope of the Project and instructed, in writing by the County, to proceed with the applicable Professional Services. The County shall not be responsible for work performed or costs incurred by Firm related to any task for which a Work Authorization or a Supplemental Work Authorization related thereto has not been issued and signed by both parties. Firm shall not be required to perform any work for which a Work Authorization or a Supplemental Work Authorization related thereto has not been issued and signed by both parties.

ARTICLE 9

PROJECT TEAM

County's Designated Representative for purposes of this Contract is as follows:

^b See Art. 6, *supra*.

Williamson County Dept. of Infrastructure
Attn: Director of Road & Bridge
3151 SE Inner Loop, Suite B
Georgetown, Texas 78626

County shall have the right, from time to time, to change the County's Designated Representative by giving Firm written notice thereof. With respect to any action, decision or determination which is to be taken or made by County under this Contract, the County's Designated Representative may take such action or make such decision or determination or shall notify Firm in writing of an individual responsible for and capable of taking such action, decision or determination and shall forward any communications and documentation to such individual for response or action. Actions, decisions or determinations by the County's Designated Representative on behalf of County shall be done in his or her reasonable business judgment unless express standards or parameters therefor are included in this Contract, in which case, actions taken by the County's Designated Representative shall be in accordance with such express standards or parameters. Any consent, approval, decision or determination hereunder by the County's Designated Representative shall be binding on County; *provided, however*, the County's Designated Representative shall not have any right to modify, amend or terminate this Contract, an Executed Work Authorization, an executed Supplemental Work Authorization or executed Contract Amendment. County's Designated Representative shall not have any authority to execute a Contract Amendment, Work Authorization or any Supplemental Work Authorization unless otherwise granted such authority by the Williamson County Commissioners Court.

Firm's Designated Representative for purposes of this Contract is as follows:

LRE Water, LLC
Attn:: Jordan Furnans, PhD, PE, PG
Vice President - Texas Operations
1101 Satellite View #301
Round Rock, Texas 78665

Firm shall have the right, from time to time, to change the Firm's Designated Representative by giving County written notice thereof. With respect to any action, decision or determination which is to be taken or made by Firm under this Contract, the Firm's Designated Representative may take such action or make such decision or determination or shall notify County in writing of an individual responsible for and capable of taking such action, decision or determination and shall forward any communications and documentation to such individual for response or action. Actions, decisions or determinations by the Firm's Designated Representative on behalf of Firm shall be done in his or her reasonable business judgment unless express standards or parameters therefor are included in this Contract, in which case, actions taken by the Firm's Designated Representative shall be in accordance with such express standards or parameters. Any consent, approval, decision or determination hereunder by the Firm's Designated Representative shall be binding on Firm. Firm's Designated Representative shall have the right to modify, amend and execute Work Authorizations, Supplemental Work Authorizations and Contract Amendments on behalf of Firm.

ARTICLE 10

PROGRESS EVALUATION

Firm shall, from time to time during the progress of the Professional Services, confer with County at County's election. Firm shall prepare and present such information as may be pertinent and necessary, or as may be reasonably requested by County, in order for County to evaluate features of the Professional Services. At the request of County or Firm, conferences shall be provided at Firm's office, the offices of County, or at other locations designated by County. When requested by County, such conferences shall also include evaluation of the Professional Services. County may, from time to time, require Firm to appear and provide information to the Williamson County Commissioners Court.

Should County determine that the progress in Professional Services does not satisfy an applicable Work Authorization or any Supplemental Work Authorization related thereto, then County shall review same with Firm to determine corrective action required.

Firm shall promptly advise County in writing of events which have or may have a significant impact upon the progress of the Professional Services, including but not limited to the following:

- A. Problems, delays, adverse conditions which may materially affect the ability to meet the objectives of an applicable Work Authorization or any Supplemental Work Authorization related thereto, or preclude the attainment of Project Professional Services units by established time periods; and such disclosure shall be accompanied by statement of actions taken or contemplated, and County assistance needed to resolve the situation, if any; and
- B. Favorable developments or events which enable meeting goals sooner than anticipated in relation to an applicable Work Authorization's or any Supplemental Work Authorization related thereto.

ARTICLE 11

SUSPENSION

Should County desire to suspend the Professional Services, but not to terminate this Contract, then such suspension may be effected by County giving Firm thirty (30) calendar days' verbal notification followed by written confirmation to that effect. Such thirty-day notice may be waived in writing by agreement and signature of both parties. The Professional Services may be reinstated and resumed in full force and effect within sixty (60) days of receipt of written notice from County to resume the Professional Services. Such sixty-day (60) notice may be waived in writing by agreement and signature of both parties. If this Contract is suspended for more than thirty (30) days, Firm shall have the option of terminating this Contract and, in the event, Firm shall be compensated for all Professional Services performed and reimbursable expenses incurred, provided such Professional Services and reimbursable expenses have been previously authorized and approved by County, to the effective date of suspension.

If County suspends the Professional Services, the contract period as determined in Article 4, and the Work Authorization or any Supplemental Work Authorization related thereto, shall be

extended for a time period equal to the suspension period.

County assumes no liability for Professional Services performed or costs incurred prior to the date authorized by County for Firm to begin Professional Services, and/or during periods when Professional Services is suspended, and/or subsequent to the completion date.

ARTICLE 12

ADDITIONAL PROFESSIONAL SERVICES

If Firm forms a reasonable opinion that any work he/she/it has been directed to perform is beyond the overall scope of this Contract, as set forth in **Exhibit B**, and as such constitutes extra work ("Additional Professional Services"), he/she/it shall promptly notify County in writing. In the event County finds that such work does constitute Additional Professional Services, County shall so advise Firm and a written Contract Amendment will be executed between the parties as provided in Article 14. Any increase to the Compensation Cap due to Additional Professional Services must be set forth in such Contract Amendment. Firm shall not perform any proposed Additional Professional Services nor incur any additional costs prior to the execution, by both parties, of a written Contract Amendment. Following the execution of a Contract Amendment that provides for Additional Professional Services, a written Work Authorization, which sets forth the Additional Professional Services to be performed, must be executed by the parties. County shall not be responsible for actions by Firm nor for any costs incurred by Firm relating to Additional Professional Services not directly associated with the performance of the Professional Services authorized in this Contract, by a fully executed Work Authorization or a fully executed Contract Amendment thereto.

ARTICLE 13

CHANGES IN COMPLETED PROFESSIONAL SERVICES

If County deems it necessary to request changes to previously satisfactorily completed Professional Services or parts thereof which involve changes to the original Professional Services or character of Professional Services under this Contract, then Firm shall make such revisions as requested and as directed by County. Such revisions shall be considered as Additional Professional Services and paid for as specified under Article 12.

Firm shall make revisions to Professional Services authorized hereunder as are necessary to correct errors appearing therein, when required to do so by County. No additional compensation shall be due for such Professional Services.

ARTICLE 14

CONTRACT AMENDMENTS

The terms set out in this Contract may be modified by a written fully executed Contract Amendment. Changes and modifications to a fully executed Work Authorization shall be made in the form of a Supplemental Work Authorization. To the extent that such changes or modifications to a Work Authorization do not also require modifications to the terms of this Contract (i.e. changes to the overall scope of Professional Services set forth in **Exhibit B**,

modification of the Compensation Cap, etc.) a Contract Amendment will not be required.

ARTICLE 15

USE OF DOCUMENTS

All documents, including but not limited to data or programs stored electronically, (hereinafter referred to as “Work Products”) prepared by Firm and its subcontractors/subconsultants are related exclusively to the services described in this Contract and are intended to be used with respect to this Project. However, it is expressly understood and agreed by and between the parties hereto that all of Work Products under this Contract shall be the property of County to be thereafter used in any lawful manner as County elects. Any such subsequent use made of documents by County shall be at County’s sole risk and without liability to Firm.

By execution of this Contract and in confirmation of the fee for services to be paid under this Contract, Firm hereby conveys, transfers and assigns to County all rights under the Federal Copyright Act of 1976 (or any successor copyright statute), as amended, all common law copyrights and all other intellectual property rights acknowledged by law in the Work Products developed under this Contract. Copies may be retained by Firm. Firm shall be liable to County for any loss or damage to any such documents while they are in the possession of or while being worked upon by Firm or anyone connected with Firm, including agents, employees, Firms or subcontractors/subconsultants. All documents so lost or damaged shall be replaced or restored by Firm without cost to County.

Upon execution of this Contract, Firm grants to County permission to reproduce Firm’s work and documents for purposes of constructing, using and maintaining the Project, provided that County shall comply with its obligations, including prompt payment of all sums when due, under this Contract. Firm shall obtain similar permission from Firm’s subcontractors/subconsultants consistent with this Contract. If and upon the date Firm is adjudged in default of this Contract, County is permitted to authorize other similarly credentialed professionals to reproduce and, where permitted by law, to make changes, corrections or additions to the work and documents for the purposes of completing, using and maintaining the Project.

County shall not assign, delegate, sublicense, pledge or otherwise transfer any permission granted herein to another party without the prior written consent of Firm. However, County shall be permitted to authorize the contractor, subcontractors and material or equipment suppliers to reproduce applicable portions of the Work Products appropriate to and for use in the execution of the Work. Submission or distribution of Work Products to meet official regulatory requirements or for similar purposes in connection with the Project is permitted. Any unauthorized use of the Work Products shall be at County's sole risk and without liability to Firm and its Firms.

Prior to Firm providing to County any Work Products in electronic form or County providing to Firm any electronic data for incorporation into the Work Products, County and Firm shall by separate written contract set forth the specific conditions governing the format of such Work Products or electronic data, including any special limitations not otherwise provided in this Contract. Any electronic files are provided by Firm for the convenience of County, and use of

them is at County's sole risk. In the case of any defects in electronic files or any discrepancies between them and any hardcopy of the same documents prepared by Firm, the hardcopy shall prevail. Only printed copies of documents conveyed by Firm shall be relied upon.

Firm shall have no liability for changes made to the Work Products by other Firms subsequent to the completion of the Project. Any such change shall be sealed by the Firm making that change and shall be appropriately marked to reflect what was changed or modified.

ARTICLE 16

PERSONNEL, EQUIPMENT AND MATERIAL

Firm shall furnish and maintain, at its own expense, quarters for the performance of all Professional Services, and adequate and sufficient personnel and equipment to perform the Professional Services as required. All employees of Firm shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of Firm who, in the reasonable opinion of County, is incompetent or whose conduct becomes detrimental to the Professional Services shall immediately be removed from association with the Project when so instructed by County. Firm certifies that it presently has adequate qualified personnel in its employment for performance of the Professional Services required under this Contract, or will obtain such personnel from sources other than County. Firm may not change the Project Manager without prior written consent of County.

ARTICLE 17

SUBCONTRACTING

Firm shall not assign, subcontract or transfer any portion of the Professional Services under this Contract without prior written approval from County. All subcontracts shall include the provisions required in this Contract. No subcontract shall relieve Firm of any responsibilities under this Contract.

ARTICLE 18

REVIEW OF PROFESSIONAL SERVICES

Firm's Professional Services will be reviewed by County under its applicable technical requirements and procedures.

A. Completion. All documents shall be submitted by Firm on or before the dates specified in the applicable Work Authorization or Supplemental Work Authorization related thereto. Upon receipt of same, the submission shall be checked for completion. "Completion" or "Complete" shall be defined as all of the required items, as set out in the applicable Work Authorization, have been included in compliance with the requirements of this Contract. The completeness of any Professional Services submitted to County shall be determined by County within thirty (30) days of such submittal and County shall notify Firm in writing within such thirty (30) day period if such Professional Services have been found to be incomplete. If the submission is Complete, County shall notify Firm and County's technical review process will begin.

If the submission is not Complete, County shall notify Firm, who shall perform such professional services as are required to complete the Professional Services and resubmit it to County. This process shall be repeated until a submission is Complete.

B. Acceptance. County shall review the completed Professional Services for compliance with this Contract. If necessary, the completed Professional Services shall be returned to Firm, who shall perform any required Professional Services and resubmit it to County. This process shall be repeated until the Professional Services are Accepted. "Acceptance" or "Accepted" shall mean that in the County's reasonable opinion, substantial compliance with the requirements of this Contract has been achieved.

C. Final Approval. After Acceptance, Firm shall perform any required modifications, changes, alterations, corrections, redesigns, and additional work necessary to receive Final Approval by the County. "Final Approval" in this sense shall mean formal recognition that the Professional Services have been fully carried out.

D. Errors and Omissions. After Final Approval, Firm shall, without additional compensation, perform any work required as a result of Firm's development of the work which is found to be in error or omission due to Firm's negligence. However, any work required or occasioned for the convenience of County after Final Approval shall be paid for as Additional Professional Services.

E. Disputes Over Classifications. In the event of any dispute over the classification of Firm's Professional Services as Complete, Accepted, or having attained Final Approved under this Contract, the decision of the County shall be final and binding on Firm, subject to any civil remedy or determination otherwise available to the parties and deemed appropriate by the parties.

F. County's Reliance on Firm. FIRM'S DUTIES AS SET FORTH HEREIN SHALL AT NO TIME BE IN ANY WAY DIMINISHED BY REASON OF ANY REVIEW, EVALUATION OR APPROVAL BY THE COUNTY NOR SHALL THE FIRM BE RELEASED FROM ANY LIABILITY BY REASON OF SUCH REVIEW, EVALUATION OR APPROVAL BY THE COUNTY, IT BEING UNDERSTOOD THAT THE COUNTY AT ALL TIMES IS ULTIMATELY RELYING UPON THE FIRM'S SKILL, ABILITY AND KNOWLEDGE IN PERFORMING THE PROFESSIONAL SERVICES REQUIRED HEREUNDER.

ARTICLE 19

VIOLATION OF CONTRACT TERMS/BREACH OF CONTRACT

Violation of contract terms or breach of contract by Firm shall be grounds for termination of this Contract, and any increased costs arising from Firm's default, breach of contract, or violation of contract terms shall be paid by Firm.

ARTICLE 20

TERMINATION

This Contract may be terminated as set forth below.

- A. By mutual agreement and consent, in writing, of both parties.
- B. By County, by notice in writing to Firm, as a consequence of failure by Firm to perform the Professional Services set forth herein in a satisfactory manner.
- C. By either party, upon the failure of the other party to fulfill its obligations as set forth herein.
- D. By County, for reasons of its own and not subject to the mutual consent of Firm, upon not less than thirty (30) days' written notice to Firm.
- E. By satisfactory completion of all Professional Services and obligations described herein.

Should County terminate this Contract as herein provided, no fees other than fees due and payable at the time of termination plus reimbursable expenses incurred shall thereafter be paid to Firm. In determining the value of the Professional Services performed by Firm prior to termination, County shall be the sole judge. Compensation for Professional Services at termination will be based on a percentage of the Professional Services completed at that time. Should County terminate this Contract under Subsection (D) immediately above, then the amount charged during the thirty-day notice period shall not exceed the amount charged during the preceding thirty (30) days.

If Firm defaults in the performance of this Contract or if County terminates this Contract for fault on the part of Firm, then County shall give consideration to the actual costs incurred by Firm in performing the Professional Services to the date of default, the amount of Professional Services required which was satisfactorily completed to date of default, the value of the Professional Services which are usable to County, the cost to County of employing another firm to complete the Professional Services required and the time required to do so, and other factors which affect the value to County of the Professional Services performed at the time of default.

The termination of this Contract and payment of an amount in settlement as prescribed above shall extinguish all rights, duties, and obligations of County under this Contract. If the termination of this Contract is due to the failure of Firm to fulfill its contractual obligations, then County may take over the Project and prosecute the Professional Services to completion. In such case, Firm shall be liable to County for any additional and reasonable costs incurred by County.

Firm shall be responsible for the settlement of all contractual and administrative issues arising out of any procurements made by Firm in support of the Professional Services under this Contract.

ARTICLE 21

COMPLIANCE WITH LAWS

A. Compliance. Firm shall comply with all applicable federal, state and local laws, statutes, codes, ordinances, rules and regulations, and the orders and decrees of any court, or administrative bodies or tribunals in any manner affecting the performance of this Contract, including without limitation, minimum/maximum salary and wage statutes and regulations, and licensing laws and regulations. Firm shall furnish County with satisfactory proof of its

compliance.

Firm shall further obtain all permits and licenses required in the performance of the Professional Services contracted for herein.

B. Taxes. Firm will pay all taxes, if any, required by law arising by virtue of the Professional Services performed hereunder. County is qualified for exemption pursuant to the provisions of Section 151.309 of the Texas Limited Sales, Excise, and Use Tax Act.

ARTICLE 22

INDEMNIFICATION

THE FIRM AGREES, TO THE FULLEST EXTENT PERMITTED BY LAW, TO INDEMNIFY AND HOLD THE COUNTY HARMLESS FROM AND AGAINST ANY AND ALL LIABILITIES, LOSSES, PENALTIES, JUDGMENTS, CLAIMS, LAWSUITS, DAMAGES, COSTS AND EXPENSES, INCLUDING, BUT NOT LIMITED TO, ATTORNEYS' FEES, ("LOSSES") TO THE EXTENT SUCH LOSSES ARE CAUSED BY OR RESULTS FROM A NEGLIGENT ACT OR OMISSION, NEGLIGENCE, OR INTENTIONAL TORT COMMITTED BY THE FIRM, THE FIRM'S EMPLOYEES, AGENTS, OR ANY OTHER PERSON OR ENTITY UNDER CONTRACT WITH THE FIRM INCLUDING, WITHOUT LIMITATION, THE FIRM'S SUBCONSULTANTS, OR ANY OTHER ENTITY OVER WHICH THE FIRM EXERCISES CONTROL.

THE FIRM FURTHER AGREES, TO THE FULLEST EXTENT PERMITTED BY LAW, TO INDEMNIFY AND HOLD THE COUNTY HARMLESS FROM ANY AND ALL LIABILITIES, LOSSES, PENALTIES, JUDGMENTS, CLAIMS, LAWSUITS, DAMAGES, COSTS AND EXPENSES, INCLUDING, BUT NOT LIMITED TO, ATTORNEYS' FEES, ("LOSSES") TO THE EXTENT SUCH LOSSES ARE CAUSED BY OR RESULTS FROM THE FIRM'S FAILURE TO PAY THE FIRM'S EMPLOYEES, SUBCONTRACTORS, SUBCONSULTANTS, OR SUPPLIERS, IN CONNECTION WITH ANY OF THE WORK PERFORMED OR TO BE PERFORMED UNDER THIS CONTRACT BY THE FIRM.

THE FIRM FURTHER AGREES TO INDEMNIFY AND HOLD THE COUNTY HARMLESS FROM ANY AND ALL LIABILITIES, LOSSES, PENALTIES, CLAIMS, LAWSUITS, DAMAGES, COSTS AND EXPENSES, INCLUDING, BUT NOT LIMITED TO, ATTORNEYS' FEES, ("LOSSES") TO THE EXTENT SUCH LOSSES ARE CAUSED BY OR RESULTS FROM THE INFRINGEMENT OF ANY INTELLECTUAL PROPERTY ARISING OUT OF THE USE OF ANY PLANS, DESIGN, DRAWINGS, OR SPECIFICATIONS FURNISHED BY THE FIRM IN THE PERFORMANCE OF THIS CONTRACT.

THE LIMITS OF INSURANCE REQUIRED IN THIS CONTRACT AND/OR THE CONTRACT DOCUMENTS SHALL NOT LIMIT THE FIRM'S OBLIGATIONS UNDER THIS SECTION. THE TERMS AND CONDITIONS CONTAINED IN THIS SECTION SHALL SURVIVE THE TERMINATION OF THE CONTRACT AND/OR CONTRACT DOCUMENTS OR THE SUSPENSION OF THE WORK HEREUNDER. TO THE EXTENT THAT ANY LIABILITIES, PENALTIES, DEMANDS, CLAIMS, LAWSUITS, LOSSES, DAMAGES, COSTS AND EXPENSES ARE CAUSED IN PART BY THE ACTS OF THE COUNTY OR THIRD PARTIES FOR WHOM THE FIRM IS NOT LEGALLY LIABLE, THE FIRM'S OBLIGATIONS SHALL BE IN PROPORTION TO THE FIRM'S FAULT. THE OBLIGATIONS HEREIN SHALL ALSO EXTEND TO ANY ACTIONS BY THE COUNTY TO ENFORCE THIS INDEMNITY OBLIGATION.

IN THE EVENT THAT CONTRACTORS INITIATE LITIGATION AGAINST THE COUNTY IN WHICH THE CONTRACTOR ALLEGES DAMAGES AS A RESULT OF ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS OF THE FIRM, ITS EMPLOYEES, AGENTS, SUBCONTRACTORS, SUBCONSULTANTS, OR SUPPLIERS, OR OTHER ENTITIES OVER WHICH THE FIRM EXERCISES CONTROL, INCLUDING, BUT NOT LIMITED TO, DEFECTS, ERRORS, OR OMISSIONS, THEN THE COUNTY SHALL HAVE THE RIGHT TO JOIN THE FIRM IN ANY SUCH PROCEEDINGS AT THE COUNTY'S COST. THE FIRM SHALL ALSO HOLD THE COUNTY HARMLESS AND INDEMNIFY THE COUNTY TO THE EXTENT THAT THE FIRM, ANY OF ITS EMPLOYEES, AGENTS, SUBCONTRACTORS, SUBCONSULTANTS, OR SUPPLIERS, OR OTHER ENTITIES OVER WHICH THE FIRM EXERCISES CONTROL, CAUSED SUCH DAMAGES TO CONTRACTOR, INCLUDING ANY AND ALL COSTS AND ATTORNEYS' FEES INCURRED BY THE COUNTY IN CONNECTION WITH THE DEFENSE OF ANY CLAIMS WHERE THE FIRM, ITS EMPLOYEES, AGENTS, SUBCONTRACTORS, SUBCONSULTANTS, OR SUPPLIERS, OR OTHER ENTITIES OVER WHICH THE FIRM EXERCISES CONTROL, ARE ADJUDICATED AT FAULT.

ARTICLE 23

FIRM'S RESPONSIBILITIES

Firm shall be responsible for the accuracy of its Professional Services and shall promptly make necessary revisions or corrections to its work product resulting from errors, omissions, or negligent acts, and same shall be done without compensation. County shall determine Firm's responsibilities for all questions arising from errors and/or omissions, subject to the dispute resolution provisions of Article 33. Firm shall not be relieved of responsibility for subsequent correction of any such errors or omissions in its work product, or for clarification of any ambiguities until after the construction phase of the Project has been completed.

ARTICLE 24

FIRM'S SEAL

To the extent required by any applicable laws, acts, rules or regulations pertaining to the types of professional services to be provided by Firm under this Contract, the Firm shall sign, seal and date all appropriate submissions to County.

ARTICLE 25

INSURANCE

Firm must comply with the following insurance requirements at all times during this Contract:

A. Coverage Limits. Firm, at Firm's sole cost, shall purchase and maintain during the entire term while this Contract is in effect the following insurance:

1. Worker's Compensation in accordance with statutory requirements.
2. Commercial General Liability Insurance with a combined minimum Bodily Injury and Property Damage limits of \$1,000,000.00 per occurrence and \$2,000,000.00 in the aggregate.

3. Automobile Liability Insurance for all owned, non-owned, and hired vehicles with combined minimum limits for Bodily Injury and Property Damage limits of \$500,000.00 per occurrence and \$1,000,000.00 in the aggregate.
4. Professional Liability Errors and Omissions Insurance in the amount of \$2,000,000.00 per claim.

B. Additional Insureds; Waiver of Subrogation. County, its directors, officers and employees shall be added as additional insureds under policies listed under (2) and (3) above, and on those policies where County, its directors, officers and employees are additional insureds, such insurance shall be primary and any insurance maintained by County shall be excess and not contribute with it. Such policies shall also include waivers of subrogation in favor of County.

C. Premiums and Deductible. Firm shall be responsible for payment of premiums for all of the insurance coverages required under this section. Firm further agrees that for each claim, suit or action made against insurance provided hereunder, with respect to all matters for which the Firm is responsible hereunder, Firm shall be solely responsible for all deductibles and self-insured retentions. Any deductibles or self-insured retentions over \$200,000 in the Firm's insurance must be declared and approved in writing by County in advance.

D. Commencement of Work. Firm shall not commence any field work under this Contract until he/she/it has obtained all required insurance and such insurance has been approved by County. As further set out below, Firm shall not allow any subcontractor/subconsultant(s) to commence work to be performed in connection with this Contract until all required insurance has been obtained and approved and such approval shall not be unreasonably withheld. Approval of the insurance by County shall not relieve or decrease the liability of Firm hereunder.

E. Insurance Company Rating. The required insurance must be written by a company approved to do business in the State or Texas with a financial standing of at least an A-rating, as reflected in Best's insurance ratings or by a similar rating system recognized within the insurance industry at the time the policy is issued.

F. Certification of Coverage. Firm shall furnish County with a certification of coverage issued by the insurer. Firm shall not cause any insurance to be canceled nor permit any insurance to lapse. **In addition to any other notification requires set forth hereunder, Firm shall also notify County, within twenty-four (24) hours of receipt, of any notices of expiration, cancellation, non-renewal, or material change in coverage it receives from its insurer.**

G. No Arbitration. It is the intention of the County and agreed to and hereby acknowledged by the Firm, that no provision of this Contract shall be construed to require the County to submit to mandatory arbitration in the settlement of any claim, cause of action or dispute, except as specifically required in direct connection with an insurance claim or threat of claim under an insurance policy required hereunder or as may be required by law or a court of law with jurisdiction over the provisions of this Contract.

H. Subcontractor/Subconsultant's Insurance. Without limiting any of the other obligations or liabilities of Firm, Firm shall require each subcontractor/subconsultant performing

work under this Contract (to the extent a subcontractor/subconsultant is allowed by County) to maintain during the term of this Contract, at the subcontractor/subconsultant's own expense, the same stipulated minimum insurance required in this Article above, including the required provisions and additional policy conditions as shown below in this Article.

Firm shall obtain and monitor the certificates of insurance from each subcontractor/subconsultant in order to assure compliance with the insurance requirements. Firm must retain the certificates of insurance for the duration of this Contract, and shall have the responsibility of enforcing these insurance requirements among its subcontractor/subconsultants. County shall be entitled, upon request and without expense, to receive copies of these certificates of insurance.

I. Insurance Policy Endorsements. Each insurance policy shall include the following conditions by endorsement to the policy:

1. County shall be notified thirty (30) days prior to the expiration, cancellation, non-renewal or any material change in coverage, and such notice thereof shall be given to County by certified mail to:

Williamson County Auditor
c/o: Pam Navarrette
710 Main Street, Suite 301
Georgetown, Texas 78626

With copy to:

Williamson County Dept. of Infrastructure
Attn: Director of Road & Bridge
3151 SE Inner Loop, Suite B
Georgetown, Texas 78626

2. The policy clause "Other Insurance" shall not apply to any insurance coverage currently held by County, to any such future coverage, or to County's Self-Insured Retentions of whatever nature.

J. Cost of Insurance. The cost of all insurance required herein to be secured and maintained by Firm shall be borne solely by Firm, with certificates of insurance evidencing such minimum coverage in force to be filed with County. Such Certificates of Insurance are evidenced as **Exhibit F** herein entitled "Certificates of Insurance."

ARTICLE 26 **COPYRIGHTS**

County shall have the royalty-free, nonexclusive and irrevocable right to reproduce, publish or otherwise use, and to authorize others to use, any reports developed by Firm for governmental purposes.

ARTICLE 27
SUCCESSORS AND ASSIGNS

This Contract shall be binding upon and inure to the benefit of the parties hereto, their successors, lawful assigns, and legal representatives. Firm may not assign, sublet or transfer any interest in this Contract, in whole or in part, by operation of law or otherwise, without obtaining the prior written consent of County.

ARTICLE 28
SEVERABILITY

In the event any one or more of the provisions contained in this Contract shall for any reason be held to be invalid, illegal or unenforceable in any respect, then such invalidity, illegality or unenforceability shall not affect any other provision thereof and this Contract shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

ARTICLE 29
PRIOR AGREEMENTS SUPERSEDED

This Contract constitutes the sole agreement of the parties hereto, and supersedes any prior understandings or written or oral contracts between the parties respecting the subject matter defined herein. This Contract may only be amended or supplemented by mutual agreement of the parties hereto in writing.

ARTICLE 30
FIRM'S ACCOUNTING RECORDS

Firm agrees to maintain, for a period of three (3) years after final payment under this Contract, detailed records identifying each individual performing the Professional Services, the date or dates the services were performed, the applicable hourly rates, the total amount billed for each individual and the total amount billed for all persons, records of reimbursable costs and expenses of other providers and provide such other details as may be requested by the County Auditor for verification purposes. Firm agrees that County or its duly authorized representatives shall, until the expiration of three (3) years after final payment under this Contract, have access to and the right to examine and photocopy any and all books, documents, papers and records of Firm which are directly pertinent to the services to be performed under this Contract for the purposes of making audits, examinations, excerpts, and transcriptions. Firm further agrees that County shall have access during normal working hours to all necessary Firm facilities and shall be provided adequate and appropriate work space in order to conduct audits in compliance with the provisions of this section. County shall give Firm reasonable advance notice of intended audits.

ARTICLE 31
NOTICES

All notices to either party by the other required under this Contract shall be personally

delivered or mailed to such party at the following respective addresses:

County: Williamson County Judge
710 Main Street, Suite 101
Georgetown, Texas 78626

With copy to: Williamson County Dept. of Infrastructure
Attn: Director of Road & Bridge
3151 SE Inner Loop, Suite B
Georgetown, Texas 78626

and to:

Office of General Counsel
Williamson County Commissioners Court
401 W. 6th Street
Georgetown, Texas 78626

Firm: LRE Water, LLC
Attn.: Jordan Furnans, PhD, PE, PG
Vice President - Texas Operations
1101 Satellite View #301
Round Rock, Texas 78665

ARTICLE 32

GENERAL PROVISIONS

A. Time is of the Essence. Subject to Article 3 hereof, Firm understands and agrees that time is of the essence and that any failure of Firm to complete the Professional Services for each phase of this Contract within the agreed work schedule set out in the applicable Work Authorization may constitute a material breach of this Contract. Firm shall be fully responsible for its delays or for failures to use its reasonable efforts in accordance with the terms of this Contract and the Firm's standard of performance as defined herein. Where damage is caused to County due to Firm's negligent failure to perform County may accordingly withhold, to the extent of such damage, Firm's payments hereunder without waiver of any of County's additional legal rights or remedies.

B. Force Majeure. Neither County nor Firm shall be deemed in violation of this Contract if prevented from performing any of their obligations hereunder by reasons for which they are not responsible or circumstances beyond their control. However, notice of such impediment or delay in performance must be timely given, and all reasonable efforts undertaken to mitigate its effects.

C. Enforcement and Venue. This Contract shall be enforceable in Georgetown, Williamson County, Texas, and if legal action is necessary by either party with respect to the

enforcement of any or all of the terms or conditions herein, exclusive venue for same shall lie in Williamson County, Texas. This Contract shall be governed by and construed in accordance with the laws and court decisions of the State of Texas excluding, however, its choice of law rules.

D. Standard of Performance. The standard of care for all professional, consulting and related services performed or furnished by Firm and its employees under this Contract will be the care and skill ordinarily used by members of Firm's profession practicing under the same or similar circumstances at the same time and in the same locality.

E. Opinion of Probable Cost. To the extent applicable, any opinions of probable Project cost or probable construction cost provided by Firm are made on the basis of information available to Firm and on the basis of Firm's experience and qualifications and represents its judgment as an experienced and qualified professional Firm. However, since Firm has no control over the cost of labor, materials, equipment or services furnished by others, or over the contractor(s') methods of determining prices, or over competitive bidding or market conditions, Firm does not guarantee that proposals, bids or actual Project or construction cost will not vary from opinions of probable cost Firm prepares.

F. Opinions and Determinations. Where the terms of this Contract provide for action to be based upon opinion, judgment, approval, review, or determination of either party hereto, such terms are not intended to be and shall never be construed as permitting such opinion, judgment, approval, review, or determination to be arbitrary, capricious, or unreasonable.

G. Reports of Accidents. Within 24 hours after Firm becomes aware of the occurrence of any accident or other event which results in, or might result in, injury to the person or property of any third person (other than an employee of the Firm), whether or not it results from or involves any action or failure to act by the Firm or any employee or agent of the Firm and which arises in any manner from the performance of this Contract, the Firm shall send a written report of such accident or other event to the County, setting forth a full and concise statement of the facts pertaining thereto. The Firm shall also immediately send the County a copy of any summons, subpoena, notice, or other documents served upon the Firm, its agents, employees, or representatives, or received by it or them, in connection with any matter before any court arising in any manner from the Firm's performance of work under this Contract.

H. Gender, Number and Headings. Words of any gender used in this Contract shall be held and construed to include any other gender, and words in the singular number shall be held to include the plural, unless the context otherwise requires. The headings and section numbers are for convenience only and shall not be considered in interpreting or construing this Contract.

I. Construction. Each party hereto acknowledges that it and its counsel have reviewed this Contract and that the normal rules of construction are not applicable and there will be no presumption that any ambiguities will be resolved against the drafting party in the interpretation of this Contract.

J. Independent Contractor Relationship. Both parties hereto, in the performance of this Contract, shall act in an individual capacity and not as agents, employees, partners, joint

ventures or associates of one another. The employees or agents of one party shall not be deemed or construed to be the employees or agents of the other party for any purposes whatsoever.

K. No Waiver of Immunities. Nothing in this Contract shall be deemed to waive, modify or amend any legal defense available at law or in equity to County, its past or present officers, employees, or agents or employees, nor to create any legal rights or claim on behalf of any third party. County does not waive, modify, or alter to any extent whatsoever the availability of the defense of governmental immunity under the laws of the State of Texas and of the United States.

L. Texas Public Information Act. To the extent, if any, that any provision in this Contract is in conflict with Tex. Gov't Code 552.001 et seq., as amended (the "Public Information Act"), the same shall be of no force or effect. Furthermore, it is expressly understood and agreed that County, its officers and employees may request advice, decisions and opinions of the Attorney General of the State of Texas in regard to the application of the Public Information Act to any items or data furnished to County as to whether or not the same are available to the public. It is further understood that County's officers and employees shall have the right to rely on the advice, decisions and opinions of the Attorney General, and that County, its officers and employees shall have no liability or obligation to any party hereto for the disclosure to the public, or to any person or persons, of any items or data furnished to County by a party hereto, in reliance of any advice, decision or opinion of the Attorney General of the State of Texas.

M. Governing Terms and Conditions. If there is an irreconcilable conflict between the terms and conditions set forth in this Contract or any Contract Amendment and the terms and conditions set forth in any Exhibit, Appendix, Work Authorization or Supplemental Work Authorization to this Contract, the terms and conditions set forth in this Contract or any Contract Amendment shall control over the terms and conditions set forth in any Exhibit, Appendix, Work Authorization or Supplemental Work Authorization to this Contract.

N. Meaning of Day. For purposes of this Contract, all references to a "day" or "days" shall mean a calendar day or calendar days.

O. Appropriation of Funds by County. County believes it has sufficient funds currently available and authorized for expenditure to finance the costs of this Contract. Firm understands and agrees that County's payment of amounts under this Contract is contingent on the County receiving appropriations or other expenditure authority sufficient to allow the County, in the exercise of reasonable administrative discretion, to continue to make payments under this Contract. It is further understood and agreed by Firm that County shall have the right to terminate this Contract at the end of any County fiscal year if the governing body of County does not appropriate sufficient funds as determined by County's budget for the fiscal year in question. County may effect such termination by giving written notice of termination to Firm.

P. Termination of Work Authorization. Should it be determined that the progress in the production of Firm's services and work does not satisfy the requirements of the approved Work Authorization as provided by Exhibit "C", attached hereto, the County shall review the approved Work Authorization with the Firm to determine the corrective action needed, including potential termination of such Work Authorization by Williamson County. Additionally, if an

approved Work Authorization has not been completed by the end of the applicable County fiscal year under this contract and the Williamson County Commissioners Court does not provide for funding through its budgetary oversight for the subsequent County fiscal year, Williamson County reserves the right to terminate such Work Authorization at its discretion.

ARTICLE 33

DISPUTE RESOLUTION

Except as otherwise specifically set forth herein, County and Firm shall work together in good faith to resolve any controversy, dispute or claim between them which arises out of or relates to this Contract, whether stated in tort, contract, statute, claim for benefits, bad faith, professional liability or otherwise ("Claim"). If the parties are unable to resolve the Claim within thirty (30) days following the date in which one party sent written notice of the Claim to the other party, and if a party wishes to pursue the Claim, such Claim shall be addressed through non-binding mediation. A single mediator engaged in the practice of law, who is knowledgeable about subject matter of this Contract, shall be selected by agreement of the parties and serve as the mediator. Any mediation under this Contract shall be conducted in Williamson County, Texas. The mediator's fees shall be borne equally between the parties. Such non-binding mediation is a condition precedent to seeking redress in a court of competent jurisdiction, but this provision shall not preclude either party from filing a lawsuit in a court of competent jurisdiction prior to completing a mediation if necessary to preserve the statute of limitations, in which case such lawsuit shall be stayed pending completion of the mediation process contemplated herein. This provision shall survive the termination of the Contract.

ARTICLE 34

SIGNATORY WARRANTY

The undersigned signatory for Firm hereby represents and warrants that the signatory is an officer of the organization for which he/she has executed this Contract and that he/she has full and complete authority to enter into this Contract on behalf of the firm. The above-stated representations and warranties are made for the purpose of inducing County to enter into this Contract.

IN WITNESS WHEREOF, County has caused this Contract to be signed in its name by its duly authorized County Judge, as has Firm, signing by and through its duly authorized representative(s), thereby binding the parties hereto, their successors, assigns and representatives for the faithful and full performance of the terms and provisions hereof, to be effective as of the date of the last party's execution below. NO OFFICIAL, EMPLOYEE, AGENT, OR REPRESENTATIVE OF THE COUNTY HAS ANY AUTHORITY, EITHER EXPRESS OR IMPLIED, TO AMEND, TERMINATE OR MODIFY THIS CONTRACT, EXCEPT PURSUANT TO SUCH EXPRESS AUTHORITY AS MAY BE GRANTED BY THE WILLIAMSON COUNTY COMMISSIONERS COURT.

COUNTY

WILLIAMSON COUNTY, TEXAS

By: _____
Bill Gravell, Jr., County Judge

Date: _____, 20____

FIRM/LRE WATER

LRE WATER, LLC

By: *Jordan Furnans*

Printed Name: JORDAN FURNANS

Title: Vice President

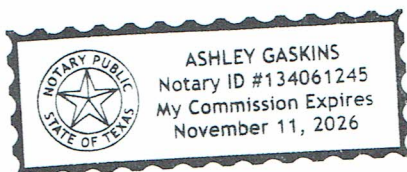
Date: 12/13, 2023

JORDAN FURNANS

SUBSCRIBED and sworn to before me the undersigned authority by Ashley Gaskins the Jordan F. Furnans of Firm, on behalf of Firm.
Vice President

Ashley Gaskins
Notary Public in and for the
State of Texas

My commission expires: 11/11/2026



LIST OF EXHIBITS ATTACHED

- | | |
|----------------------|---|
| (1) Exhibit A | Debarment Certification |
| (2) Exhibit B | Professional Services |
| (3) Exhibit C | Work Authorization |
| (4) Exhibit D | Rate Schedule |
| (5) Exhibit E | Williamson County Vendor Reimbursement Policy |
| (6) Exhibit F | Certificates of Insurance |

EXHIBIT A
DEBARMENT CERTIFICATION

STATE OF TEXAS

§

COUNTY OF WILLIAMSON

§

§

I, the undersigned, being duly sworn or under penalty of perjury under the laws of the United States and the State of Texas, certifies that Firm and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any federal department or agency:

(b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public* transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

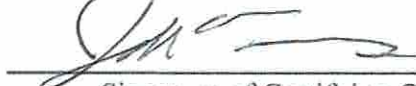
(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity* with commission of any of the offenses enumerated in paragraph (1)(b) of this certification;

(d) Have not within a three-year period preceding this application/proposal had one or more public transactions* terminated for cause or default; and

(e) Have not been disciplined or issued a formal reprimand by any State agency for professional accreditation within the past three years.

LRE Water, LLC

Name of Firm



Signature of Certifying Official

JORDAN FURNANS

Printed Name of Certifying Official

Vice President

Title of Certifying Official

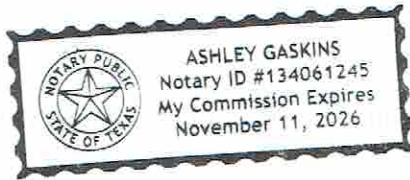
12/13, 2023

Date

(2) Where the PROVIDER is unable to certify to any of the statements in this certification, such PROVIDER shall attach an explanation to this certification.

* federal, state, or local

SUBSCRIBED and sworn to before me the undersigned authority by JORDAN FURNANS
the Vice President of LRE Water, on behalf of
said firm.



Ashley Gaskins
Notary Public in and for the
State of Texas

My commission expires: 11/11/2026

EXHIBIT B

PROFESSIONAL SERVICES

The scope of Professional Services under the Contract is to provide reports and a computer dashboard to facilitate the County's understanding of the opportunities and limitations related to the development of groundwater resources within the Trinity Aquifer east of I-35. Individual tasks and deliverables are as follows:

Task 1 - Conceptual Model	
Task 1A	Lit Review / Data Collection
Task 1B	Digitize and Assemble Datasets
Task 1C	Develop Aquifer Structure & Stratigraphy
Task 1D	Develop Three-Dimensional Model
Task 1E	Determine Well Completion
Task 1F	Aquifer Hydraulic Properties
Task 1G	Water Levels
Task 1H(a)	Recharge and ET
Task 1H(b)	Pumpage Estimates
Task 1I(a)	Surface Water & Spring Flow
Task 1I(b)	Water Quality
Task 1J	GDB and GIS Data
Task 1K	QA/QC
Task 1L	Report
Task 2 - Numerical Model	
Task 2A	Grid Discretization & Structure
Task 2B	Model Parameter Files
Task 2C	Boundary Condition Files
Task 2D	Calibration & Predictive Evaluation
Task 2E	Predictive Simulations
Task 2F	Report
Task 3 - Dashboard Development	
Task 3A	Dashboard Tools Workshop
Task 3B	Platform & Technology Workshop
Task 3C	County Data Integration
Task 3D	Geodatabase Integration
Task 3E	Public Data Integration
Task 3F	Interactive Map Development/Testing
Task 3G	Analytical Tools Development
Task 3H	Documentation
Task 3I	User Training
Task 3J	System Transfer
Task 3K	Ongoing Support

The tasks above and deliverables are further detailed on the following pages.

PHASE I APPROACH

DEVELOPMENT OF HYDROGEOLOGIC CONCEPTUAL MODEL

TASK 1A – LITERATURE REVIEW AND DATA COLLECTION

At Project onset, select LRE Water team members will perform a comprehensive literature review that examines previously documented geology and groundwater data within Williamson County. This literature review includes but is not limited to this exhaustive list of local and regional studies and reports:

- Hill (1887)
- Cumley and others (1942)
- Follett (1959), Tucker (1962)
- Klemm and others (1975)
- Senger and Kreidler (1984)
- Woodruff (1985)
- Baker and others (1986)
- Collins (1987)
- Kreidler and others (1987)
- Yelderman and others (1987)
- Nordstrom (1987)
- Land and Dorsey (1988)
- Dahl (1990)
- Flores (1990)
- Senger and others (1990)
- Duffin and Musick (1991)
- Lozo and Stricklin (1994)
- Hauwert and Warton (1997)
- Ridgeway and Petrini (1999)
- Collins and others (2002)
- Jones (2002)
- Slade and others (2002)
- Dutton and others (2003)
- Bené and others (2004)
- Shah (2005)
- Bené and others (2007)
- Standen and Ruggiero (2007)
- Yelderman (2013)
- Kelley and others (2014)
- Eckhoff (2016)
- Shi and others (2016)
- Keester and Konetchy (2017)
- Robinson and Lupton (2018)
- Yelderman (2019)
- Hunt and Smith (2020)
- Standen and Clause (2021)
- Jones (2023)

Additionally, we will query the following state managed water well databases for all available water well data within Williamson County: TWDB GWDB, TDLR SDR, Texas Commission on Environmental Quality (TCEQ) Public Water Supply Database and TWDB Recorder Well database.

As of 6/1/2023, we have found at least 4,138 water wells within Williamson County (Figure 2). We also have access to the BEG Geophysical Log Facility and Well Record Library where we will be able to obtain geophysical logs and exploratory oil and gas well reports that can be used to examine groundwater resources. Our

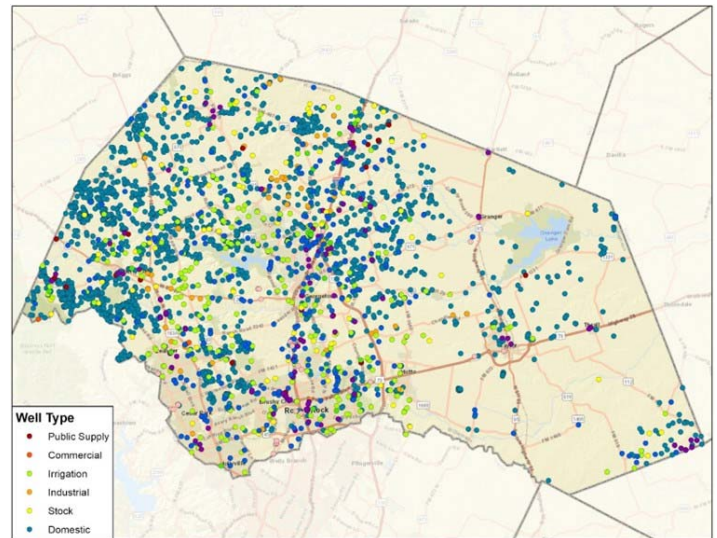


Figure 2 Water Wells across Williamson County

TASK 1B – DIGITIZE AND ASSEMBLE DATA

Bringing together discrete data sources as outlined in the previous section ensures that the best available science is developed, however it also presents challenges as it relates to the usability of the data due to the various and often conflicting formats. Many of the aforementioned reports and studies will require post-processing as the embedded data is only available in analog format. This will include but is not limited to the digitization of well reports and tables, georeferencing of maps and the plotting of well locations based on Texas land survey data. All data will be digitized and projected using the TWDB GAM coordinate system. We will standardize the data by creating excel tables and GIS shapefiles and rasters. All data will be carefully documented and will include metadata which details the origins and limitations. We will also produce and provide digital copies of all relevant materials.

TASK 1C – DEVELOP AQUIFER STRUCTURE AND STRATIGRAPHY

pre-existing relationships with geophysical log repositories across the state such as The Subsurface Library will also be leveraged for additional geophysical log data resources.

Our team has already reviewed and extracted data from several of these sources for our ongoing study of western Williamson County. We intend to build upon this data as we infill for the development of the conceptual model.

For the development of aquifer stratigraphy, we will use the stratigraphic framework conceptualized by Klemt and others (1975) (Figure 3). This early framework is the industry standard when working in central Texas as it provides relevant details on both the Edwards and Trinity Aquifers. We will subdivide the Trinity Aquifer into corresponding Upper, Middle and Lower Trinity units, by defining the following stratigraphic units from available geophysical log data: Glen Rose Formation, Hensell Sand, Cow Creek Limestone, Pearsall, Hammett Shale, Sligo, and Hosston. This division follows the Northern Trinity and Northern Edwards Balcones Fault Zone (BFZ) groundwater model framework (Bené and others, 2004; Jones, 2023), and is consistent with nomenclature used by the scientific community, TWDB, TCEQ, and local water well drillers.

To define possible brackish aquifer units out west and the freshwater Carrizo-Wilcox Aquifer out east we will follow the stratigraphic models developed by Standen and Ruggiero (2007) and Dutton and others (2003), respectively. Using

these models and the Edwards BFZ conceptual framework (Jones, 2023) we propose to expand this study beyond the Trinity Aquifer to also include the following aquifers within Williamson County: the Edwards which is defined as a TWDB major aquifer and hydraulically connected to the Trinity Aquifer along the BFZ (Jones, 2023), the Hickory Sandstone a TWDB minor aquifer that may contain brackish groundwater in portions of western Williamson County (Shi and others, 2016) and the Carrizo-Wilcox a TWDB major aquifer that contains shallow freshwater in far eastern Williamson County (Dutton and others, 2003). We will also review the shallow alluvial aquifer systems and determine if there are other hydrogeologic units with local aquifer potential.

have over all other hydrogeologic consultants within Texas.

Our primary goal is complete county-wide coverage by building upon our ongoing research in the area, while an acute attention to detail will be required in areas with faults, and where changes in aquifer conditions are observed. This

System	Group	Stratigraphic Units	Hydrologic Unit	Lithologic Description
	Washita	Georgetown		Thin interbeds of richly fossiliferous, nodule, massive, fine-grained limestone and marl
		Kiamichi		Marl and thin limestone seams, and clay
	Fredericksburg	Edwards Limestone	Edwards and associated limestones	Massive, brittle vugular limestone and dolomite and solution collapse features
		Comanche Peak Limestone		Fine-grained, fairly hard, nodular fossiliferous marly limestone
		Walnut Formation		Hard and soft limestone, marls, and clays
			Aquitard	
	Upper Trinity	Glen Rose	Upper Trinity Aquifer	Limestone, shale, and anhydrite
Cretaceous	Middle Trinity	Hensell Sand Member	Middle Trinity Aquifer	Composed of sands and sandstones, gravels and conglomerates that are poorly to well cemented, and sometimes interbedded with sandy limestone lenses, multicolored clays, and gray to green shales.
		Cow Creek Limestone Member		Cream to tan color limestones that are fossiliferous, sometimes sandy, and can locally contain fractures and cavities.
		Pearsall Member	Aquitard	"Redbeds" Limestones, multi-colored clays, and sand lenses
		Hammett Shale		Gray to dark gray silty sandy shale with streaks of dolomite.
	Lower Trinity			
		Hosston Member	Lower Trinity Aquifer	"Lower Trinity Sand," composed of poorly sorted multicolored conglomerate, poorly sorted to well sorted fine and coarse grain sand and sandstones, streaks of shale and occasional limestone.

Figure 3 Proposed stratigraphic framework, modified after Klemt and others (1975)

The LRE Water team will maximize the use of available data by analyzing up to 100 publicly available geophysical logs, and up to 250 well reports to complement our ongoing study of western Williamson County. Geophysical logs are the industry preferred choice when it comes to stratigraphic analysis, and provide insights into obscure subsurface conditions. Our geophysical log analysis provides the foundation of all subsequent research, which includes the interpretation of oil and gas cable tool drillers' reports and water well drillers' lithology descriptions from both the TDLR SDR and TWDB GWDB water well reports. From our experience in the region we have developed a very specific set of criteria and techniques which allow us to efficiently review and process these water well records. This is an LRE Water competitive advantage we

effort will yield the most comprehensive hydrostratigraphy dataset ever developed for Williamson County, and possibly for any county within Texas.

For this task we will use industry-leading software packages, PETRA and ArcGIS. Combined, these will increase efficiency as it relates to data acquisition, processing and analysis.

We will also consider the use of 2D seismic line data which is available in some areas of Williamson County. This data is rarely used in groundwater studies due to budget constraints and survey line availability. Based on the available distribution of data and the associated cost of acquiring this data we made a preliminary decision to exclude this data from our technical approach. However we will discuss this possibility at the Project kickoff meeting, from which the County may make the ultimate decision.

TASK 1D – DEVELOP THREE-DIMENSIONAL MODEL

We know that an important aspect of any hydrogeologic conceptual model is accuracy, transparency and the ability to effectively communicate complex groundwater science. The development of a three-dimensional geologic model will accomplish all these objectives. Using Leapfrog geologic modeling software, we will develop an interactive three-dimensional model for Williamson County. This model will include the stratigraphic structure developed under Task 1C and also incorporate water well and water level data developed through Task 1B and 1F.

Our team has experience building these models across the state including in Williamson County (Figure 4), where we are currently under contract to develop a model for the western half of the county as part of ongoing research. This model will provide an additional layer of quality assurance by demonstrating the spatial distribution of aquifer data

in a three-dimensional workspace which simultaneously increases data transparency and validates our final product and deliverables. Often, these models also find their way into classrooms where they serve as a resource for educators in communities across the state of Texas.

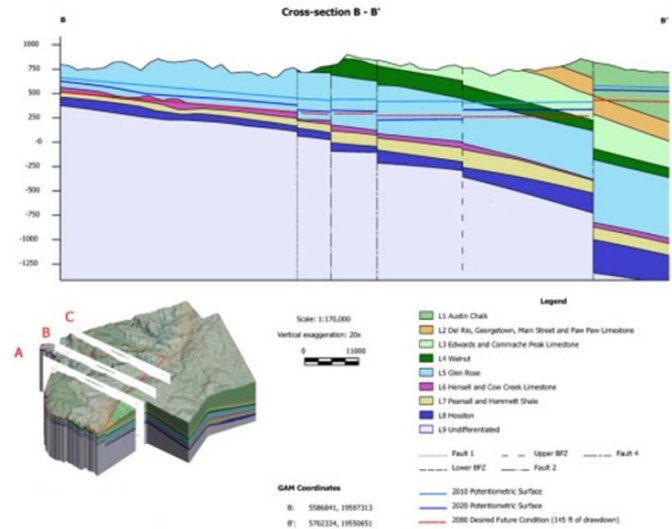


Figure 4 Three-dimensional leapfrog model with cross-section to review faulting in portions of Williamson and Bell County

TASK 1E – DETERMINE WELL COMPLETION

The ability to accurately and efficiently assign water wells to a specific aquifer unit is always a hindrance to the accuracy of county-wide and regional aquifer studies. Our competitors typically ignore or simplify this task by only considering the location of a well and its corresponding depth. This strategy usually leads to errors, especially when evaluating the Trinity Aquifer where the units are very thin and quickly change due to faulting. We pride ourselves in our commitment to excellence and do not take this same shortcut. We have developed a proprietary tool that can quickly determine well completion and screen intervals across the various state water well databases. With this information we will use the three-dimensional model to efficiently assign the appropriate aquifer to every water well across the County. This has never been done for Williamson County and this attention to detail will permeate its way through the rest of our deliverables as we are able to confidently correlate water levels, water quality, aquifer properties and pumpage data.

TASK 1F – AQUIFER HYDRAULIC PROPERTIES

The hydraulic properties of an aquifer quantify how easily water moves through the geologic formations and how much water those formations can hold in storage.

Commonly, these hydraulic properties are referred to as the aquifer transmissivity and storativity. The most common way to determine the site-specific hydraulic properties of an aquifer is to conduct an aquifer test where groundwater is pumped from a well at a constant rate while the change in water level in the pumping well and other nearby wells (if available) is measured.

For the hydrogeologic conceptual model, we will gather publicly available test data for wells completed in the Trinity and Edwards aquifers. In addition, we will request data from public water systems in Williamson County with wells completed in the studied aquifers. Additional data may also be available from Certification of Groundwater Availability reports previously submitted to Williamson County with proposed plats.

As noted, the data provided is site-specific to and near the well location. To develop estimates for the entire aquifer within Williamson County, we will utilize interpolation methods for extending the local characteristics to the county level.

TASK 1G – WATER LEVELS

Based on the TWDB GWDB, there are 587 water wells with historic water level measurements in Williamson

County.

LRE Water will compile this data and develop decadal water level data including the most recent water level measurement on every well in this database. Water levels will be assigned an aquifer based on the results from Task 1E.

TASK 1H – RECHARGE AND EVAPOTRANSPIRATION

Aquifer recharge refers to the amount of water entering the aquifer flow system from precipitation, irrigation return flows, or urban water system loss. Evapotranspiration is

the portion of groundwater in the shallow groundwater flow system that is lost to evaporation or is captured and transpired by plants. For the deep Trinity Aquifer in eastern Williamson County, these values are essentially zero, yet in western Williamson County and in the Edwards Aquifer, these properties may become more significant.

Our team has previously worked on a project for the TWDB to assess the potential recharge to various aquifers in central and west Texas including formations of the Edwards and Trinity aquifers. In addition, members of our team are working on the update to the regional groundwater availability model by GMA-8, which includes the development of a model specifically for simulating historical recharge. We will investigate the applicability of this recharge model to the county-scale model, make appropriate updates, and incorporate the results as part of our conceptual model development.

TASK 1H – ESTIMATE PUMPAGE

Pumping is frequently one of the most uncertain values in the conceptual model. However, the effects of pumping also tend to have the greatest effect on model development and tuning of the model parameters. As such, we will investigate various sources to inform our understanding and quantification of the historical pumping timing, locations, and amounts.

To develop the pumping datasets for the conceptual model, we will draw upon our team's previous and ongoing experience with TWDB Water Use Survey data, pumping data from local entities, and estimation of pumping from publicly available datasets. Research conducted by our team members and others has shown that data from the TWDB is generally a good starting point for estimation of pumping, but the values reported commonly have readily identifiable errors. For future modeling purposes, we will apply and further refine pumping estimation methods that are based on the publicly available data.

TASK 1I – SURFACE WATER & SPRING FLOW

Surface water features of significance within the study area include the San Gabriel River, Berry Creek, Brushy Creek, and Lake Georgetown. Slade and others (2002)

documented numerous gaining and losing stream segments of San Gabriel River, Berry Creek, and Brushy Creek as these streams flow across the Edwards Aquifer outcrop; however, baseflow in these streams indicates groundwater discharge. Slade and others

(2002) also indicate that groundwater-surface-water interaction occurs between Lake Georgetown and the underlying Edwards Aquifer.

Major springs within the study area are associated with major faults, and include Cowan Creek Spring, Georgetown Spring, Berry Spring, and Knight Spring (Jones, 2023). Numerous smaller springs occur within the study area and are mostly associated with the Brushy Creek and San Gabriel River watersheds (Jones, 2023).

Spring locations and discharge will be estimated based on information in the TWDB GWDB, a US Geological Survey database of Texas springs (Heitmuller and Reece, 2003; Brune, 1975), and Brune (1975). Recent aerial imagery will be

used to confirm spring locations and estimate if they are still active based on vegetation or other indicators, and limited field visits will be made (where access is granted) to confirm location, current condition and estimate flow rate.

Cross-formational flow between the Edwards and Trinity aquifers through the Balcones Fault Zone is probable within the study area, as indicated by areas that are strongly geochemically correlated (Eckhoff, 2016). We will review the geochemical model and determine where cross-formational flows are occurring in Williamson County.

TASK 1I – WATER QUALITY

Based on the TWDB GWDB, there are 449 wells with water chemistry analyses within Williamson County. Through

our literature review we will also identify and process select historical measurements identified by Cumley and others (1942), Baker and others (1986), Kreidler and others (1987), and also review and the hydrogeochemical models developed by Senger and others (1999) and Eckhoff (2016). Our team will assess this data and determine if water chemistry data can be correlated to individual aquifer units, determine if there are variations within aquifer units, and define freshwater and brackish water limits that are present in the downdip section (east of Interstate 35) of the Trinity and Edwards aquifers (Muller and others, 1990; Robinson and Lupton, 2018; & Jones, 2023).

TASK 1J – DEVELOP GEODATABASE AND SUPPLEMENTAL DATA

Geodatabases are not only useful for standardizing data, but also serve as a data repository which increases access and overall usability. All digital format data with geographic coordinates or spatial representation developed from

Task 1A - 1I will be compiled into a geodatabase. Additional supplemental data as it relates to rainfall, physiography and climate, soil, and surface hydrology will also be acquired and included in the geodatabase during this task. The geodatabase will conform to the TWDB Geodatabase/

Data Model Requirements, We will also follow the Federal Geographic Data Committee recommendations for the reporting of metadata.

TASK 1K – QUALITY ASSURANCE AND QUALITY CONTROL

Quality assurance and quality control are embedded and emphasized throughout the Project beginning

with our project management philosophy which emphasizes an attention to detail and establishes clear and concise requirements. LRE Water has invested in the development of several proprietary tools that not only expedite data extraction and processing but also serve as quality assurance tools by removing opportunities to introduce user errors. Quality control will be reinforced by implementing statistical data models which identify outlier data points and by reserving budget and staff time to carefully review the deliverables associated with each task.

TASK 1L – DATA DOCUMENTATION (TASK 1 REPORT)

We will develop a conceptual model report that details our Task 1A - 1I analysis and follows the TWDB Conceptual Model Report checklist. We recommend that the County consider the delivery of a draft report which provides the County with an opportunity to provide comments and offer recommendations before this report is finalized.

Phase 1 Deliverables:

Leapfrog Three-Dimensional Model

- Delivery of the Leapfrog project file used to develop the Leapfrog viewer module (freeware), with detailed data documentation.
- Delivery of the Leapfrog viewer module, with the following:
 - » (3) reference layers: aerial, streets and political boundaries and surface geology
 - » Hydrogeologic framework as defined by Task 1C.
 - » Water well locations defined by Task 1A with well completion intervals defined by Task 1D.
 - » Current water level and potentiometric surfaces as defined by Task 1G.
- A user manual developed by LRE Water specifically for Williamson County.
 - » (1) in-person or online training session for County staff.

Geodatabase

- (1) Geodatabase as described by Task 1J.

Conceptual Model Report

- Summarizes the Project with relevant items discussed in Task 1A - 1I according to TWDB conceptual model report checklist.

real-world data into the MODFLOW input file format and files which we will use for calibration of the model parameters. During the construction and calibration of the model, we will use an open-source scripting-based approach.

PHASE 2 APPROACH DEVELOPMENT OF MODFLOW GROUNDWATER AVAILABILITY MODEL

The TWDB approved model for Trinity Aquifer within Williamson County is the Updated GAM of the Northern Trinity and Woodbine Aquifers. Partly due to recognized errors and limitations with the current model, GMA-8 recently approved an update of this model with a focus on its use within joint planning. Members of our Team are supporting work on this model update, and we will work closely with the GMA-8 consultants to ensure consistency between the local Williamson County model and the update to the regional groundwater availability model.

The following tasks outline the workflow to convert the hydrogeologic conceptual model to the numerical model. The first part of this process is to translate the

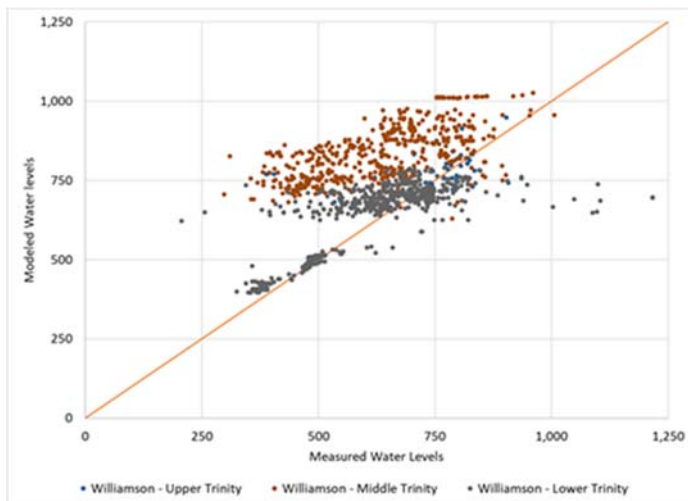


Figure 5 Measured vs. Modeled Water Levels in Williamson County

The workflow approach will ensure that the model is developed with transparency, efficiency, and reproducibility.

The model will be developed using MODFLOW 6, which is the latest version of MODFLOW. The model will be designed, constructed, and documented to TWDB standards.

We understand the purpose of the Williamson County Trinity Aquifer model is to provide information regarding groundwater availability for future development. While the County currently requires certification of groundwater availability if groundwater is to be the source of water for a proposed development, the County staff have limited tools at their disposal for evaluating the submitted certifications.

The model, along with the dashboard and analytical tools developed based on the hydrogeologic conceptual model and MODFLOW model, will aid the County in effectively planning water supplies for proposed and future developments. Having this clear model purpose will guide our design, construction, calibration, and uncertainty evaluation efforts.

TASK 2A – GRID DISCRETIZATION AND STRUCTURE

The first task in model development is determining the model area. Since the area of interest is Williamson County, the model area will need to extend beyond the county to avoid potential issues when simulating pumping near the Williamson County line. The extension of the area beyond the county will either coincide with natural geologic boundaries, utilize the current (or in process of being updated) GAM to determine groundwater inflows or outflows, or be assigned as time-variant water level

elevations.

Discretization of the aquifer units in a model refers to how we divide the hydrogeologic units into smaller areas for simulation. When using MODFLOW 6, there are three ways to discretize the aquifer units: structured discretization (that is, traditional layer, row, and column format), discretization by vertices (same as the traditional approach but using

x and y coordinates instead of row and column numbers), and unstructured discretization (node based format where a modeler must define how each point in the model is connected to adjacent points). We will develop the grid for

the model using the unstructured approach which will allow for stratigraphic pinch outs or other structures identified in the hydrogeologic conceptual model. In addition, the use of an unstructured grid will allow for nodes to represent varying amounts of aquifer area; for example, a node can represent a smaller area where the density of real-world data is greater. For the aquifer discretization, we will assign the bottom of each layer to each cell using the stratigraphic layer elevations from the hydrogeologic conceptual model phase. Once the model parameters and boundary conditions have been developed (Task 2B and Task 2C), we will refine the grid where necessary to improve the numerical representation of local conditions.

TASK 2B – PREPARE MODEL PARAMETERS FILES

For this task, the model parameter files refer to the input files associated with the hydraulic properties of the model or items associated with the observations of aquifer conditions. In addition, as part of this task we will compile and/or format observations of water level and spring flow that may be used during calibration of the model. These parameters include:

- Transmissivity, hydraulic conductivity, and storativity values.
- Transient water levels and spring flows. As applicable, water level and spring flow data will be incorporated into the model dataset to aid in the calibration of the Edwards Aquifer layer of the model.
- Faulting within the aquifer system. We will incorporate the representation of faults within the model to reflect observations and mapping.

Along with the parameters, we will also investigate the potential for monthly time discretization for the model. However, if available data are insufficient for meaningful calibration at the monthly time period level, we will focus on developing the model to reflect annual aquifer conditions with subsequent analytical tools being used to investigate shorter time periods.

TASK 2C – PREPARE MODEL BOUNDARY CONDITION FILES

The model boundary conditions refer to items where the flow, water level, or a combination of the flow and water level are defined for the aquifer. For example, pumping is a flow boundary condition where the groundwater withdrawals are prescribed for the aquifer. Preparation of these files will include:

- General head or constant head boundaries along the edge of the model. We will evaluate the choice of boundary type through preparation and testing of the model.
- We will incorporate the transient recharge to the Edwards and Trinity aquifers developed from the conceptual model. Our evaluation will be limited to the estimated potential for

recharge across the outcrop area.

- Pumping volumes from the well locations and corresponding pumping estimates.
- Drains will be used to represent spring locations and evaluate outflow from the aquifer.
- We will evaluate the explicit incorporation and simulation of streams within the model. Incorporating the drain cells may be sufficient for the purposes of the model.

TASK 2D – CALIBRATION AND PREDICTIVE EVALUATION

Model calibration and predictive evaluation will involve conducting multiple simulations and adjusting parameters to minimize the difference between simulation results and field observations. In addition, the approach will seek to also minimize predictive uncertainty where it is reasonable and justified by observations to do so. Our approach will involve both manual and automated methods.

- Manual testing will involve performing one simulation at a time and assessing the results. This step will help us identify potential errors in the input files, observation files, computation of results, or other issues that may interfere with automated calibration.
- Automated calibration will involve the application of the PEST++ software to conduct multiple simulations simultaneously to evaluate possible parameter values.

Application of this approach will allow us to achieve calibration of the model much faster than through manual calibration alone. In addition, we anticipate applying the approach to create an ensemble of parameters that will aid in informing the uncertainty in the predictions.

The model purpose will guide our approach to calibration and predictive uncertainty evaluation. We will work with County leaders and staff to weight the calibration and predictive uncertainty such that model reliability may be clearly understood with regard to the ability of the formations to provide sufficient groundwater to meet projected needs.

TASK 2E – PREDICTIVE SIMULATIONS

Once the model is calibrated, we will perform three predictive simulations. We will work with County leaders and staff to define the scope of these predictive simulations. Possible simulations may involve potential developments that may use groundwater, potential aquifer storage and recovery projects, or areas of existing groundwater use.

Results for the simulations will illustrate the predicted effect on aquifer conditions based on the simulation parameters and constraints.

TASK 2F – REPORT

We will prepare a draft and final report documenting the data, model construction, model calibration, and predictive simulation results. Model development and reporting will follow the TWDB's Groundwater Availability Model Standards.

Phase 2 Deliverables:

Groundwater Flow Model Files

Volumetric estimates for the availability of water for each subunit of the Trinity Aquifer within Williamson County

Maps of available drawdown for all subunits of the Trinity Aquifer

Groundwater Model Report

PHASE 3 APPROACH

DEVELOPMENT OF GROUNDWATER DASHBOARD AND ANALYTICAL DATABASE MANAGEMENT TOOLS

TASK 3A – DASHBOARD AND ANALYTICAL TOOLS FUNCTIONAL REQUIREMENTS WORKSHOP

Our first step in this phase is designed to ensure that LRE Water and the County are on the same page regarding all aspects of the dashboard and analytical tools. We will hold a half-day workshop (at the County's offices or other location as the County prefers), to discuss overarching goals, and to generate a list of required and desired features and functionality. This will be an all-inclusive "wish list" which we will then also prioritize, to ensure the most important items are completed within this scope.

A key outcome for this workshop will be a **Functional Requirements Document** which will include a checklist of features and functionality, and we will use this to track our progress as the tools are developed. Lower priority items will be tackled after higher priority items are completed, tested and deployed. LRE Water will check in regularly with the County on progress through the requirements list. When we are 75% through the budget for this Phase, we will hold a virtual "requirements re-group" meeting to look at what still remains and to confirm priorities for the remainder of the work.

During this workshop we will also discuss at a high level the technology behind these tools and even sketch out some mockups of how tools might look, however a more in-depth discussion of the platform, software, etc. will not be part of this workshop (see Task 3B).

Ideally the half-day workshops included in Tasks 3A and 3B would be scheduled back to back on the same day.

TASK 3B – PLATFORM AND TECHNOLOGY COMPATIBILITY WORKSHOP

The County has indicated that the dashboard and analytical tools should be transitioned to the County as a deliverable.

To ensure this can happen seamlessly, LRE Water will hold a half-day workshop at the County's offices, specifically with the County staff that will be taking on the hosting and management of these work

products. At this workshop we will discuss software and platform options, and determine which will work best for both LRE Water's development process and the County's eventual hosting and maintenance.

LRE Water will provide, for consideration at the workshop, the platform and associated technology used for our most recently developed dashboards that are similar to what

we believe the County will need and want. LRE Water's currently managed systems are built using a set of reusable components that can be leveraged to bring Williamson County's system online extremely quickly if the County agrees to use our recommended platform and technology.

Our platform recommendations include:

- Cloud server hosted in the **Amazon Web Services** EC2 cloud, to serve as a secure data management portal dedicated to the dashboard and analytical tools (<https://aws.amazon.com/ec2/>).
 - » Note that LRE Water will create an AWS account specifically for this Project which the County can take over ownership of at the end of the Project. LRE Water can continue to support the system at that point with credentials provided by the County.
- **PostgreSQL** database for capturing data from other systems, processing and manipulating it for use by the dashboard and analytical tools (<https://www.postgresql.org/>).
- Custom web based dashboard application built with **Javascript and React** (<https://react.dev/>); this approach provides complete flexibility for layout and user experience, is very lightweight and fast, and the React libraries provide already-built functionality for interacting with spatial and tabular data.
- Netlify for hosting the web application "front-end" components (<https://www.netlify.com/for/web-applications/>).
- Heroku for hosting the web application "back-end" components (<https://www.heroku.com/home>).
- Scripting languages can include PHP, Python and R as appropriate for different functionality.

We can be flexible and have expertise with a variety of different development platforms, software programs and programming languages. A key outcome of this workshop will be a **Technology Plan Document** for the platform, software, and technology to be used to build the system.

Please note that LRE Water also offers long term hosting and maintenance services, and we can discuss a hybrid approach to this transition, whereby the County takes on all ownership of the systems but LRE Water remains on board to manage and support the system's "back end" processes,

software and cloud infrastructure. Working out how this shared responsibility might look would be a key outcome of this workshop, as well as a roadmap for transitioning the tools and training County technical staff when the time comes.

Ideally the half-day workshops included in Tasks 3A and 3B would be scheduled back to back on the same day.

TASK 3C– COUNTY DATA INTEGRATION

LRE Water will work with the County to either acquire, or link to where possible, County data sources that will be featured in or relied upon within the dashboard and analytical tools. LRE Water has extensive experience connecting to and importing data from a wide variety of systems and formats. These may include GIS data, tabular data managed within

a County database, or even spreadsheet data where it is managed and consistent enough to be used as a reliable data source.

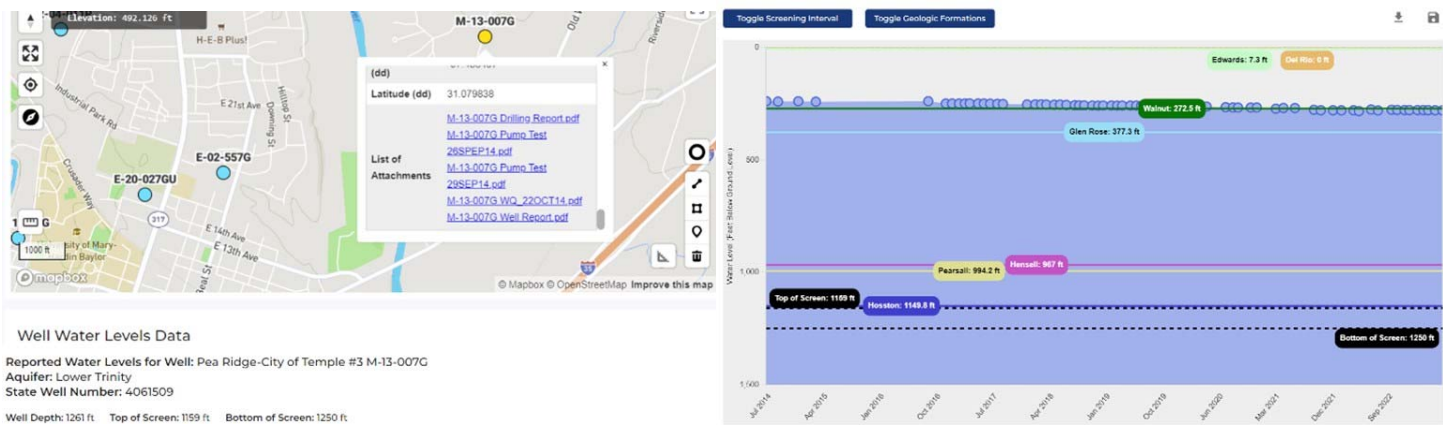
We expect that some portion of identifying data sets to be

integrated or imported, and the methodology for handling each, will be discussed and even fleshed out at the Task 3B Technology workshop. However, since the focus of that workshop will be on the platform and software, we believe we will need a separate meeting specifically focused on identifying data sets for this integration task. This meeting can be virtual, and could be split into multiple meetings if needed to allow LRE Water to connect with different individuals within the County responsible for different types of data.

The processes used to acquire, import and/or connect with County datasets will be carefully documented (see Task 3H). Where possible, these processes will be coded and automated as well so they can be easily repeated for updating data. In the case of data that can be pulled into the dashboard system programmatically (GIS layers via a web service for instance, or telemetry data from a SCADA system), we can also automate an update process that will run on its own periodically so that the dashboard and analytical tools have the most current information at all times.

As part of this task LRE Water will produce the list of County data sources determined for inclusion in the tools.

Figure 7 Automated processes pull in new data to this map-driven interactive dashboard display showing groundwater levels over time. The graph has been integrated with the client's database to include well-specific construction and hydrogeological information, screening intervals, and geologic formations.



TASK 3D – GEODATABASE INTEGRATION

The Geodatabase that will be developed in Phase 1 will also provide valuable information to the dashboard and input datasets for the analytical tools. Because LRE Water will be developing these data, we will be able to easily integrate them into the dashboard and analytical tools. Similar to the processes outlined for Task 3C, we will make these connections “live” where possible so if the data sets are updated, so is the dashboard or analytical tool that relies upon them. The processes for integrating and importing will be carefully documented (see Task 3H), and if possible automated to make future updates as streamlined as possible.

Please note that other data sources developed as part of this overall Project effort may also be incorporated into the Dashboard. As part of this task, LRE Water will produce the list of County data sources determined for inclusion in the tools.

Interactive dashboard maps can visualize spatial information a variety of ways and be programmed to update when the underlying data changes so the information is always current (Figure 8).

TASK 3E – TDLR, TWDB, AND OTHER PUBLIC DATA ACQUISITION AND INTEGRATION

Other data sources available publicly will be pulled into the dashboard system as well, and leveraged for the analytical tools where needed. Many of these sources can be integrated using web services and automated scripts that call data down from the public repositories nightly.

Where this is not a viable option, LRE Water will acquire the data manually. In both cases, the processes for acquiring, importing and processing the data for display or use by the dashboard system and analytical tools will be carefully documented (see Task 3H), and automated where possible.

Identification of the publicly available data to be incorporated into the dashboard will begin at the Task 3A Requirements workshop, but may continue into the

early portion of this task. As public data sources are often easily accessible, even sources of data identified later may be incorporated if they are not too time consuming. LRE Water will work with the County on a case by case basis to determine if public data sources identified after the Requirements workshop can be added to the list and incorporated as part of this phase (Figure 9).

Figure 8 Interactive dashboard maps can visualize spatial information a variety of ways and be programmed to update when the underlying data changes so the information is always current.

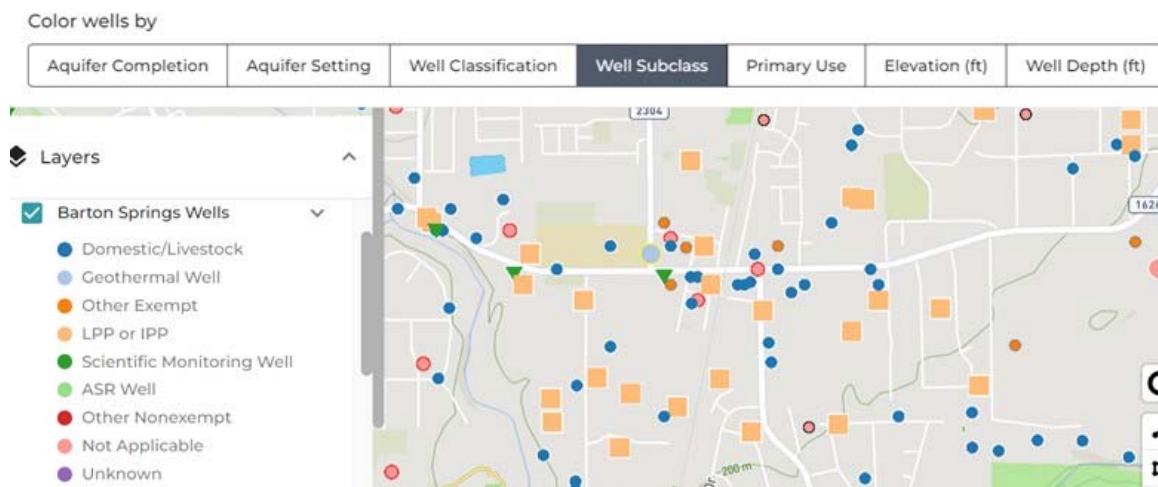
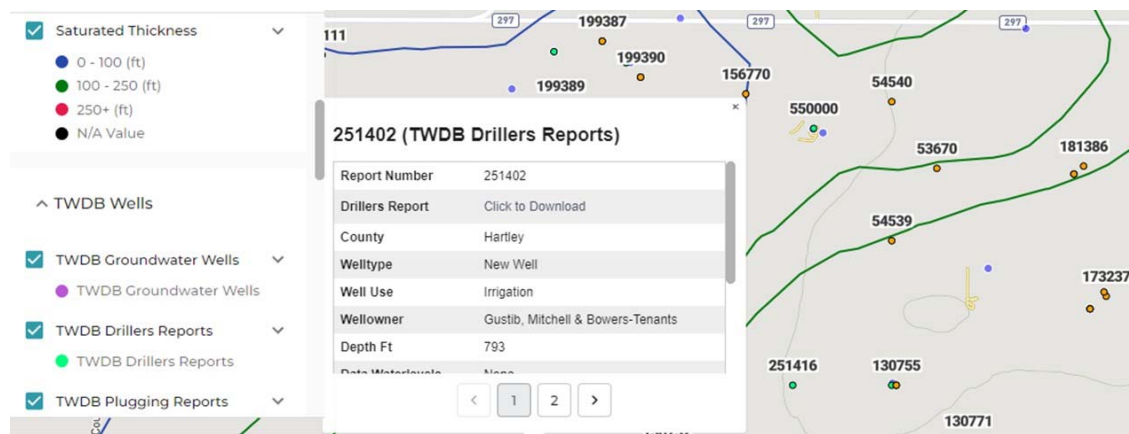


Figure 9 TWDB data provides web services for their well points data which can be automatically called to keep a dashboard display current with the most recently published TWDB data.



TASK 3F – INTERACTIVE MAP DEPLOYMENT, TESTING AND FEEDBACK (ALPHA, BETA, FINAL)

LRE Water employs an “Agile” development methodology when creating our dashboards and tools. This means that we intentionally iterate through the process of building, deploying, and testing multiple times throughout a project. **In doing so we provide opportunities for review and feedback, early and often.**

Initially LRE Water will deploy an “Alpha” version of the dashboard which will be primarily an interactive map and the associated functionality that goes with that map

product. This release would happen before any analytical tools have been developed, and some of the underlying data may still be incomplete or even missing, but it will provide an early opportunity for the County to weigh in on “look and feel” and get a sense for how the system will work, in general (Figure 10).

Feedback from the Alpha deployment will be incorporated into the system, and additional priority functionality will be added before an “early-Beta” deployment will be released. This Beta version of the tool will actually be an evolving product as we continue to build out functionality and release it as it becomes complete. The Beta version will be updated frequently and available for review and feedback on a continual basis.

When all functionality determined to be within the scope of this Project is deployed, LRE Water will lead a formal demo

of the tools with the County and provide a Beta Review Period for additional feedback and revision. Once this is complete and feedback has been incorporated into the system, it will be considered the Final version.

TASK 3G – ANALYTICAL TOOLS DEPLOYMENT, TESTING AND FEEDBACK (ALPHA, BETA, FINAL)

In the same vein as Task 3F, LRE Water will develop the analytical tools by iterating through development stages, providing early versions of the tools for review. Especially with the analytical tools, we want to ensure that they

not only work as expected but that they are intuitive to use. Early feedback from the County will help make this happen. The Alpha versions of these tools may be more like “interactive mockups” where the data may not yet be connected or the calculations may not be complete. As these aspects are completed they will be deployed to an early-Beta version, which like the dashboard will evolve as development progresses and more finalized working versions are deployed (Figures 11, 12, and 13).

Feedback from the Alpha and Beta deployments will be incorporated into the tools as development continues, and when the analytical tools are complete, LRE Water will lead a formal demo of the tools with the County and provide

an additional Review Period for additional feedback and revision. Once this is complete and feedback has been incorporated into the system, the analytical tools will be considered Final.

Figure 10 This system for North Plains GCD (available at <https://northplainsgcd.lre-up.com/map>) was deployed in stages, providing the client with early access to visualization and query tools which they were able to start using even when the system was still in its infancy. By using the early version of the system, NPGCD was able to provide constructive feedback and help guide updates ensuring a final product that fully met their needs and expectations.

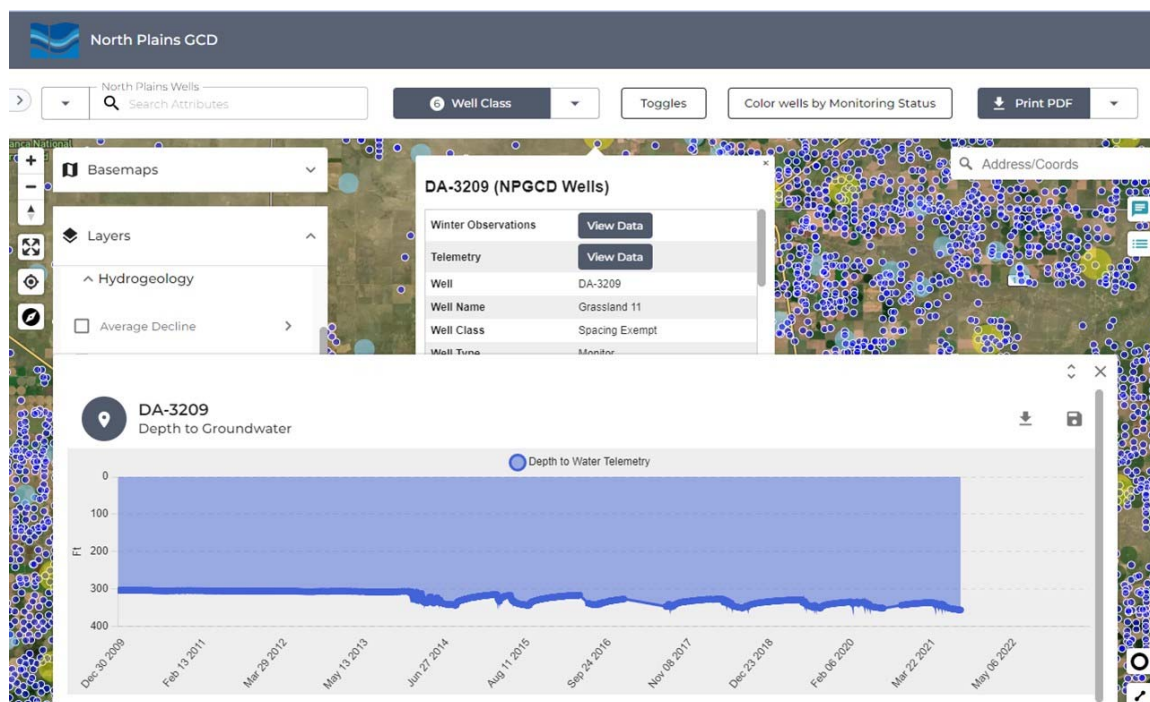


Figure 11 Example of an Analytical Tool which provides an estimate of drawdown impacts on nearby wells based on a hypothetical proposed well.

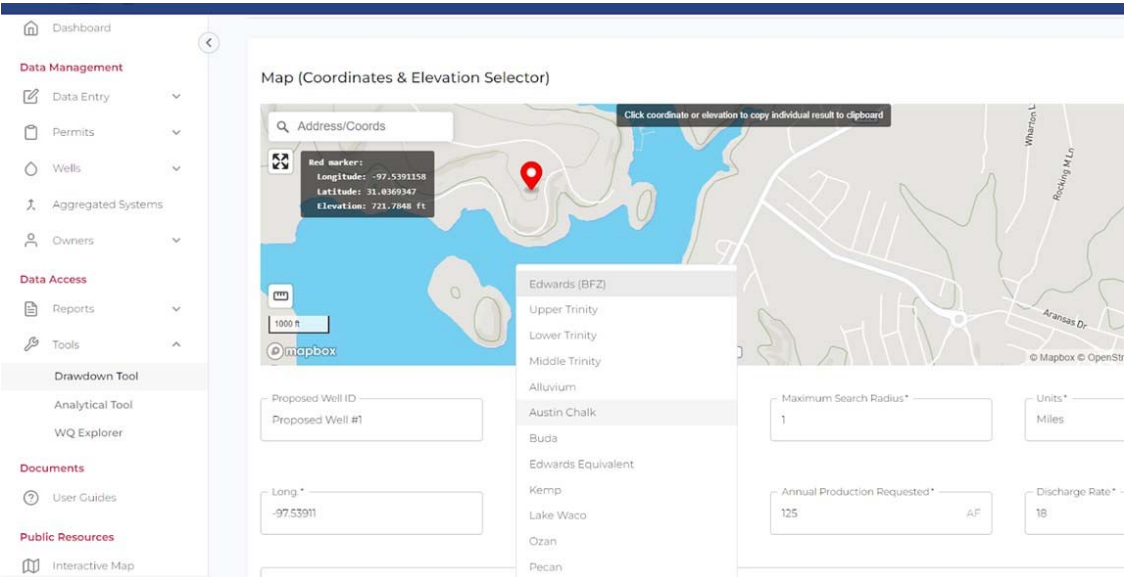


Figure 12 Example of an Analytical Tool which provides estimates of geologic formation depths at any point within the District, based on 3D hydrogeologic model data.

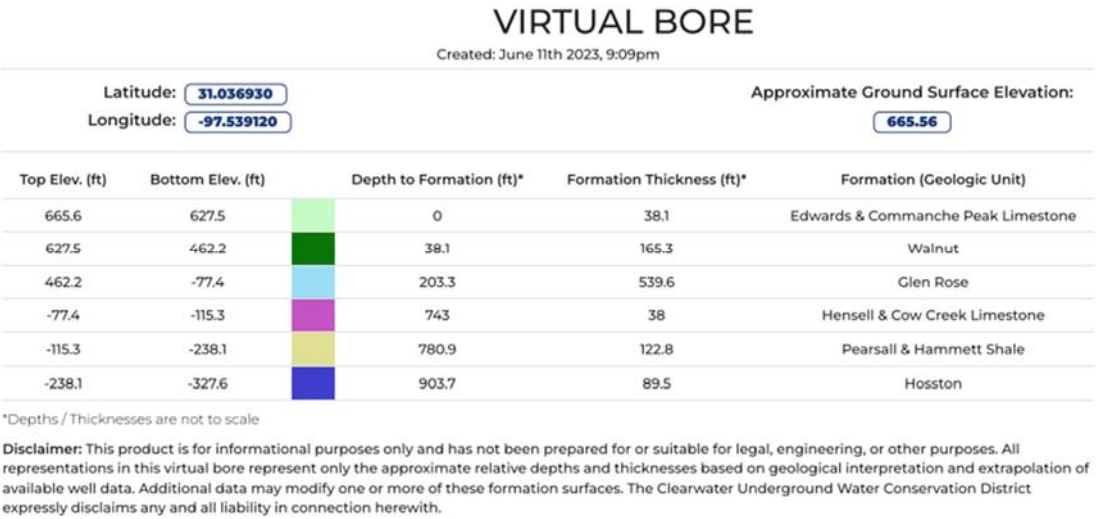
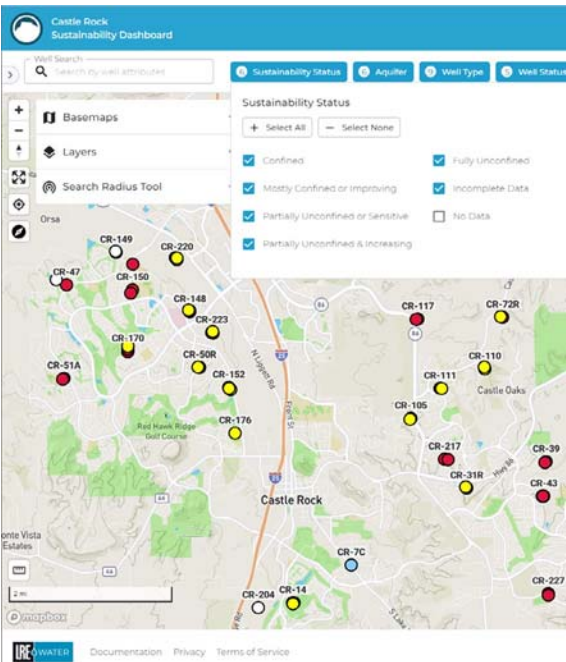


Figure 13 This interactive map-driven dashboard rolls up data pulled from a groundwater level monitoring SCADA system to calculate a “Sustainability Status” based on a regression over time on the relationship between the groundwater levels and the top of the aquifer. Map points change color dynamically as new data come into the system potentially changing the status of a well.



TASK 3H – TECHNICAL DOCUMENTATION

As mentioned in the previous Task 3 descriptions, processes and methods for incorporating data, updating data, and managing automation will be carefully documented. This task is dedicated to bringing that documentation together into a comprehensive technical reference guide that will be used

to maintain the system and keep it current over time. The intended audience for this documentation will be technical staff, either within the County or LRE Water depending on how the ongoing support responsibilities are eventually assigned. This document will be completed before system training so it can be used as training material as well and will include:

- Complete system documentation including access credentials for administrators for all aspects of the system
- “Universe Diagram” illustrating how the system works overall and from where the data is obtained
- Complete list of data sources and how to re-acquire the data manually
- Methods for acquiring data sources programmatically, where available
- Documentation of scripts created for calling data programmatically
- Documentation of scripts, functions and scheduled tasks created to update the system automatically

TASK 3I – USER TRAINING WORKSHOP

LRE Water will provide user training for the system. Our goal will be to develop a system that is intuitive to use and requires little guidance, however we do anticipate that the analytical tools in particular, but possibly some aspects of the dashboard tools as well, would benefit from some “power user” instruction. The system will also be built with on-screen tips that should assist users in navigating through the tools independently.

We recommend that this training be virtual, to allow as many people as possible to attend, and also to allow for everyone to be on their own computer during the training so they can follow along with examples and have hands-on experience using the system during the workshop. This workshop can be limited to 2 hours.

TASK 3J – SYSTEM TRANSFER WORKSHOP

We anticipate that transferring the system to the County will be best done with an LRE Water staff person on-site at the County, working directly with the County staff that will be responsible for managing the system. We propose planning on a full day with the morning focused on working through the technical documentation and the afternoon focused on hands-on training and testing. Because we anticipate this system will be hosted in a cloud environment, there will not be actual migration of code or data. The transfer workshop will be focused on getting County staff comfortable with accessing all aspects of the system’s “under the hood” components, and familiar with how to troubleshoot, monitor, and update the system’s back end.

TASK 3K – ONGOING SUPPORT

LRE Water provides long term hosting, maintenance and support for all our systems. We are also happy to provide training and oversight to your own staff so that you can take on the maintenance yourselves, but rely on LRE Water staff when there are questions or significant updates needed.

LRE Water maintains several dozen systems like the one we hope to build for the County, for existing clients and we have staff dedicated to monitoring these systems and keeping them up to date with critical software patches and in compliance with new browser releases. There may be certain aspects of the system that are more effectively managed and maintained by County staff, and other aspects that are better suited to remain under LRE Water’s watchful eye. We can be flexible on how this works and recommend that as part of the Task 3J System Transfer Workshop

we work out the details of long term maintenance and who will be responsible for what.

We anticipate this system will be hosted in a cloud environment, and we will set this environment up so that full ownership can be transitioned to the County. LRE Water develops all of its systems to be fully non-proprietary, leveraging Open Source software to also keep the system as low-cost to maintain as possible. Typical “bare bones” (meaning not including labor) annual hosting fees for our systems run between \$500 - \$1,200 per year as a result.

Depending on the complexity of the system and how “hands on” the County wishes us to be long term, we can provide additional hosting costs to cover LRE Water staff time for system monitoring, backups, updates, and other items as requested.

We also look forward to providing you with long term support for the system, including on-call help for any aspect of using the system. Our support contracts are also very flexible and customizable, and essentially based on the number of hours you anticipate needing LRE Water Support times a “blended” billing rate for our technology team.

When you do call, we will have a single point of contact for you to reach out to, but will also have a team of individuals ready to help. We can provide support directly to users of your system, outside your organization as requested.

Phase 3 Deliverables:

- Functional Requirements Document
- Technology Plan Document
- Data Sources List (will be incorporated into Technical Documentation as well)
 - » County Data Sources
 - » Phase 1 and 2 Data Sources
 - » Public Data Sources
- Alpha, Beta and Final versions of the Dashboard and Analytical Tools
- Technical Documentation

Project Management Deliverables (to be provided throughout the life of the Project):

- Detailed monthly progress reports to the Project Manager
 - » Project schedule with relative progress of each subtask.
 - » Project invoices with detailed description of services provided.
 - » A brief discussion on any pertinent observations, or issues.
- Monthly Commissioner’s Court Attendance (upon request)
- Meetings with the County project manager, County staff and/or County Commissioner’s (upon request)

EXHIBIT C

WORK AUTHORIZATION

(To Be Completed and Executed After Contract Execution)

WORK AUTHORIZATION NO. _____

PROJECT: _____

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Professional Services, being dated _____, 20____ and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and LRE Water, LLC (the "Firm").

Part 1. The Firm will provide the following Professional Services set forth in Attachment "B" of this Work Authorization.

Part 2. The maximum amount payable for services under this Work Authorization without modification is _____.

Part 3. Payment to the Firm for the services established under this Work Authorization shall be made in accordance with the Contract.

Part 4. This Work Authorization shall become effective on the date of final acceptance and full execution of the parties hereto and shall terminate on _____, 20____. The Professional Services set forth in Attachment "B" of this Work Authorization shall be fully completed on or before said date unless extended by a Supplemental Work Authorization.

Part 5. This Work Authorization does not waive the parties' responsibilities and obligations provided under the Contract.

Part 6. County believes it has sufficient funds currently available and authorized for expenditure to finance the costs of this Work Authorization. Firm understands and agrees that County's payment of amounts under this Work Authorization is contingent on the County receiving appropriations or other expenditure authority sufficient to allow the County, in the exercise of reasonable administrative discretion, to continue to make payments under this Contract. It is further understood and agreed by Firm that County shall have the right to terminate this Contract at the end of any County fiscal year if the governing body of County does not appropriate sufficient funds as determined by County's budget for the fiscal year in question. County may effect such termination by giving written notice of termination to Firm.

Part 7. This Work Authorization is hereby accepted and acknowledged below.

EXECUTED this ____ day of _____, 20__.

FIRM:

LRE Water, LLC

By: _____
Signature

Printed Name

Title

COUNTY:

Williamson County, Texas

By: _____
Signature

Printed Name

Title

LIST OF ATTACHMENTS

Attachment A - Services to be Provided by County

Attachment B - Services to be Provided by Firm

Attachment C - Work Schedule

Attachment D - Fee Schedule

EXHIBIT D

RATE SCHEDULE

LRE WATER, LLC - STAFF CLASSIFICATION & HOURLY RATES

Effective 11/09/2023 through 12/31/2024

Williamson County Project – 23RFSQ79

NOTE: Firm's staff listed below are those most likely to work on the Project. Firm may utilize other staff (as needed), possibly including staff not hired as of the date of execution of the Contract. In the event staff and rates are not provided below, the parties must amend the Contract to include such staff and rates prior to Firm submitting any invoices and requests for payments for time incurred by staff or at rates not included.

<u>Primary LRE Water Staff – TX Operations</u>	
<u>Classification</u>	<u>Rate (\$/hr)</u>
Project Manager	\$225
Senior Project Geologist	\$200
Staff Geologist III	\$185
Staff Geologist I	\$143
Project Geologist	\$176
Senior Project Geologist	\$220
Staff Geologist I	\$143
Staff Geologist I	\$137
Staff Geologist II	\$153
<u>Project Support Staff – TX Operations</u>	
<u>Classification</u>	<u>Rate (\$/hr)</u>
Project Geologist	\$169
Staff Geologist I	\$135
Technology Specialist II	\$141
Data Scientist II	\$169
Project Developer	\$183
Project Engineer	\$185
Project Manager	\$220
Technical Advisor	\$205
Project Geologist	\$220
Project Engineer	\$215
Staff Geologist II	\$142

Subcontractor/Subconsultant Staff Rates

<u>Firm/Affiliation</u>	<u>Classification</u>	<u>Rate (\$/hr)</u>
RW Harden & Assoc.	Senior Geologist	\$250
RW Harden & Assoc	Senior Geologist	\$250
RW Harden & Assoc	Geologist	\$150
RW Harden & Assoc	Senior Geologist	\$250
Baylor University	Technical Advisor	\$250
UT BEG	Technical Advisor	\$250
UT BEG	Technical Advisor	\$250
UT BEG	Technical Advisor	\$250
UT BEG	Technical Advisor	\$250

CPI Rate Adjustments: Rates will remain firm for the initial first year of the Contract and such rates shall be deemed the “Initial Base Rates”. Engineer must request rate adjustments, in writing, at least thirty (30) days prior to each annual anniversary date of the Contract and any rate changes will take effect on the first day following the prior year. If Engineer fails to request a CPI rate adjustment, as set forth herein, the adjustment will be effective thirty (30) days after the County receives Engineer’s written request. No retroactive rate adjustments will be allowed.

Price adjustments will be made in accordance with changes in the U.S. Department of Labor Consumer Price Index (CPI-U) for All Urban Consumers, All Items, South Region (Base 1982-84 = 100).

The rate adjustment will be determined by multiplying the Initial Base Rates by a fraction, the numerator of which is the index number for most recently released index before each annual anniversary date of the Contract and the denominator of which is the index number for the first month of the Contract (the index number for the month in which the Contract was originally executed). If the products are greater than the Initial Base Rates, County will pay the greater amounts as the rates during the successive year until the next rate adjustment. Rates for each successive year will never be less than the Initial Base Rates.

EXHIBIT E

Williamson County Vendor Reimbursement Policy

The purpose of this Williamson County Vendor Reimbursement Policy (“Policy”) is to provide clear guidelines to vendors on Williamson County’s expectations and requirements regarding allowable reimbursable expenditures and required backup. The Policy will also minimize conflicts related to invoice payments and define non-reimbursable items. This Policy is considered a guideline and is not a contract.

This Policy may be altered, deleted or amended, at any time and without prior notice to vendors, by action of the Williamson County Commissioners Court. Unenforceable provisions of this Policy, as imposed by applicable law, regulations, or judicial decisions, shall be deemed to be deleted. Any revisions to this Policy will be distributed to all current vendors doing business with the County.

1. Invoices and Affidavits

- 1.1 Invoices must adequately describe the goods or services provided to County and include all required backup (i.e., reimbursable expenses, mileage log, timesheets, receipts detailing expenses incurred etc.) that is in a form acceptable to the Williamson County Auditor. Invoices that do not adequately describe the goods or services provided to County or contain backup that is satisfactory to the Williamson County Auditor will be returned to vendor for revisions and the provision above relating to invoice errors resolved in favor of the County shall control as to the required actions of vendor and when such invoice must be paid by the County.
- 1.2 In the event an invoice includes charges based upon hourly billing rates for services or any other rates based upon the amount of time worked by an individual or individuals in performing services, whether the charges are being billed directly to the County or whether they are the basis of invoices from subcontractors for which the vendor seeks reimbursement from the County, the charges shall be accompanied by an affidavit signed by an officer or principal of the vendor certifying that the work was performed, it was authorized by the County and that all information contained in the invoice that is being submitted is true and correct.
- 1.3 Upon County’s request, vendor must submit all bills paid affidavits wherein vendor must swear and affirm that vendor has paid each of its subcontractors, laborers, suppliers and material in full for all labor and materials provided to vendor for or in connection with services and work performed for County and, further, vendor must swear and affirm that vendor is not aware of any unpaid bills, claims, demands, or causes of action by any of its subcontractors, laborers, suppliers, or material for or in connection with the furnishing of labor or materials, or both, for services and work performed for County.

2. Travel Reimbursement

- 2.1 The County will only cover costs associated with travel for vendors outside a 45-mile radius from the Williamson County Courthouse, 710 Main Street, Georgetown, Texas 78626.
- 2.2 The County will only cover costs associated with travel as documented work for County. If a vendor is also doing business for another client, the travel costs must be split in proportion to the amount of work actually performed for the County and the other client. The only allowable travel expense will be for the specific days worked for Williamson County.
- 2.3 No advance payments will be made to vendor for travel expenditures. The travel expenditure may only be reimbursed after the expenditure/trip has already occurred and vendor has provided the Williamson County Auditor with all necessary and required backup.

- 2.4 Vendors must submit all travel reimbursement requests on each employee in full. Specifically, a travel reimbursement request must include all related travel reimbursement expenses relating to a particular trip for which vendor seeks reimbursement. Partial travel reimbursement requests will not be accepted (i.e., vendor should not submit hotel and mileage one month then the next month submit rental car and airfare). If the travel reimbursement appears incomplete, the invoice will be sent back to the vendor to be submitted when all information is ready to submit in full.
- 2.5 Reimbursement for transportation costs will be at the most reasonable means of transportation (i.e.: airline costs will be reimbursed for coach rate, rental car costs will only be reimbursed if rental car travel was most reasonable means of travel as compared to travel by air).
- 2.6 The County will not be responsible for, nor will the County reimburse additional charges due to personal preference or personal convenience of individual traveling.
- 2.7 The County will not reimburse airfare costs if airfare costs were higher than costs of mileage reimbursement.
- 2.8 Additional expenses associated with travel that is extended to save costs (i.e., Saturday night stay) may be reimbursed if costs of airfare would be less than the cost of additional expenses (lodging, meals, car rental, mileage) if the trip had not been extended. Documentation satisfactory to the Williamson County Auditor will be required to justify expenditure.
- 2.9 County will only reimburse travel expense to necessary personnel of the vendor (i.e., no spouse, friends or family members).
- 2.10 Except as otherwise set forth herein, a vendor must provide a paid receipt for all expenses. If a receipt cannot be obtained, a written sworn statement of the expense from the vendor may be substituted for the receipt.
- 2.11 Sales tax for meals and hotel stays are the only sales taxes that will be reimbursed. Sales tax on goods purchased will not be reimbursed. A sales tax exemption form is available from the Williamson County Auditor's Office upon request.
- 2.12 The County will not pay for any late charges on reimbursable items. It is the responsibility of the vendor to pay the invoice first and seek reimbursement from the County.

3. Meals

- 3.1 Meal reimbursements are limited to a maximum of \$59.00 per day on overnight travel. On day travel (travel that does not require an overnight stay), meal reimbursements are limited to a maximum of \$25.00 per day. The travel must be outside the Williamson County Courthouse, 710 Main Street, Georgetown, Texas 78626 by a 45-mile radius.
- 3.2 Receipts are required on meal reimbursement amounts up to the maximum per day amount stated for overnight or day travel. If receipts are not presented, the vendor can request per diem (per diem limits refer to 3.2). However, a vendor cannot combine per diem and meal receipts. Only one method shall be allowed.
- 3.3 Meals are reimbursable only to vendors who do not have necessary personnel located within a 45-mile radius of the Williamson County Courthouse, 710 Main Street, Georgetown, Texas 78626, who are capable of carrying the vendor's obligations to the County. Meals will not be reimbursed to vendors who are located within a 45-mile radius of the Williamson County Courthouse.
- 3.4 County will not reimburse for alcoholic beverages.
- 3.5 Tips are reimbursable but must be reasonable to limitation of meal allowance
- 3.6 No meals purchased for entertainment purposes will be allowed.
- 3.7 Meal reimbursement must be substantiated with a hotel receipt.

4. Lodging

- 4.1 Hotel accommodations require an itemized hotel folio as a receipt. The lodging receipt should include name of the motel/hotel, number of occupant(s), goods or services for each individual charge (room rental, food, tax, etc.) and the name of the occupant(s). Credit card receipts or any other form of receipt are not acceptable.
- 4.2 Vendors will be reimbursed for a single room rate charge plus any applicable tax. If a single room is not available, the vendor must provide documentation to prove that a single room was not available in order to justify the expense over and above the single room rate. A vendor may also be required to provide additional documentation if a particular room rate appears to be excessive.
- 4.3 Personal telephone charges, whether local or long distance, will not be reimbursed.

5. Airfare

- 5.1 The County will only reimburse up to a coach price fare for air travel.
- 5.2 The County will exclude any additional charges due to personal preference or personal convenience of the individual traveling (i.e., seat preference charges, airline upgrades, etc. will not be an allowable reimbursement)
- 5.3 Air travel expenses must be supported with receipt copy of an airline ticket or an itinerary with actual ticket price paid. If tickets are purchased through a website, vendor must submit a copy of the webpage showing the ticket price if no paper ticket was issued.
- 5.4 Cancellation and/or change flight fees may be reimbursed by the County but vendor must provide the Williamson County Auditor with documentation in writing from a County department head providing authorization for the change.
- 5.5 The County will not reimburse vendor for tickets purchased with frequent flyer miles.

6. Car Rental

- 6.1 Vendors that must travel may rent a car at their destination when it is less expensive than other transportation such as taxis, airport shuttles or public transportation such as buses or subways.
- 6.2 Cars rented must be economy or mid-size. Luxury vehicle rentals will not be reimbursed. Any rental costs over and above the cost of a mid-size rental will be adjusted.
- 6.3 Vendors will be reimbursed for rental cars if the rental car cost would have been less than the mileage reimbursement cost (based on the distance from vendor's point of origin to Williamson County, Texas) had the vendor driven vendor's car.
- 6.4 Vendors must return a car rental with appropriate fuel levels as required by rental agreement to avoid the car rental company from adding fuel charges.
- 6.5 Rental agreement and credit card receipt must be provided to County as back up for the request for reimbursement.
- 6.6 Insurance purchased when renting vehicle may also be reimbursed.
- 6.7 Car Rental optional extras such as GPS, roadside assistance, and administrative fees on Tolls will not be reimbursed.

7. Personal Car Usage

- 7.1 Personal vehicle usage will be reimbursed in an amount equal to the standard mileage rate allowed by the IRS.
- 7.2 Per code of Federal Regulations, Title 26, Subtitle A, Chapter 1, Subchapter B, Part IX, Section 274(d), all expense reimbursement requests must include the following:

7.2.1.1 Date

7.2.1.2 Destination

7.2.1.3 Purpose

- 7.2.1.4 Name of traveler(s)
- 7.2.1.5 Correspondence that verifies business purpose of the expense
- 7.3 The mileage for a personal vehicle must document the date, location of travel to/from, number of miles traveled and purpose of trip.
- 7.4 Mileage will be reimbursed on the basis of the most commonly used route.
- 7.5 Reimbursement for mileage shall not exceed the cost of a round trip coach airfare.
- 7.6 Reimbursement for mileage shall be prohibited between place of residence and usual place of work.
- 7.7 Mileage should be calculated from employee's regular place of work or their residence, whichever is the shorter distance when traveling to a meeting or traveling to Williamson County, Texas for vendors who are located outside of the Williamson County Courthouse, 710 Main Street, Georgetown, Texas 78626 by at least a 45-mile radius.
- 7.8 When more than one person travels in same vehicle, only one person may claim mileage reimbursement.
- 7.9 Tolls, if reasonable, are reimbursable. Receipts are required for reimbursement. If a receipt is not obtainable, then written documentation of expense must be submitted for reimbursement (administrative fees on Tolls will not be reimbursed).
- 7.10 Parking fees, if reasonable are reimbursable for meetings and hotel stays. For vendors who contract with a third party for visitor parking at vendor's place of business, Williamson County will not reimburse a vendor based on a percentage of its contracted visitor parking fees. Rather, Williamson County will reimburse Vendor for visitor parking on an individual basis for each time a visitor uses Vendor's visitor parking. Receipts are required for reimbursement. If a receipt is not obtainable, then written documentation of expense must be submitted for reimbursement.
- 7.11 Operating and maintenance expenses as well as other personal expenses, such as parking tickets, traffic violations, and car repairs and collision damage are not reimbursable.

8. Other Expenses

- 8.1 Taxi fare, bus tickets, conference registrations, parking, etc. must have a proper original receipt.

9. Repayment of Non-reimbursable Expense.

Vendors must, upon demand, immediately repay County for all inappropriately reimbursed expenses whenever an audit or subsequent review of any expense reimbursement documentation finds that such expense was reimbursed contrary to these guidelines and this Policy. Williamson County reserves the right to retain any amounts that are due or that become due to a vendor in order to collect any inappropriately reimbursed expenses that a vendor was paid.

10. Non-Reimbursable Expenses

In addition to the non-reimbursable items set forth above in this Policy, the following is a non-exhaustive list of expenses that will not be reimbursed by Williamson County:

- 10.1 Alcoholic beverages/tobacco products
- 10.2 Personal phone calls
- 10.3 Laundry service
- 10.4 Valet service (excludes hotel valet)
- 10.5 Movie rentals
- 10.6 Damage to personal items
- 10.7 Flowers/plants

- 10.8 Greeting cards
- 10.9 Fines and/or penalties
- 10.10 Entertainment, personal clothing, personal sundries and services
- 10.11 Transportation/mileage to places of entertainment or similar personal activities
- 10.12 Upgrades to airfare, hotel and/or car rental
- 10.13 Airport parking above the most affordable rate available
- 10.14 Excessive weight baggage fees or cost associated with more than two airline bags
- 10.15 Auto repairs
- 10.16 Babysitter fees, kennel costs, pet or house-sitting fees
- 10.17 Saunas, massages or exercise facilities
- 10.18 Credit card delinquency fees or service fees
- 10.19 Doctor bills, prescription and other medical services
- 10.20 Hand tools
- 10.21 Safety Equipment (hard hats, safety vests, etc.)
- 10.22 Office Supplies
- 10.23 Lifetime memberships to any association
- 10.24 Donations to other entities
- 10.25 Any items that could be construed as campaigning
- 10.26 Technology Fees
- 10.27 Sales tax on goods purchased
- 10.28 Any other expenses which Williamson County deems, in its sole discretion, to be inappropriate or unnecessary expenditures.

EXHIBIT F

CERTIFICATES OF INSURANCE

ATTACHED BEHIND THIS PAGE