



## **PROFESSIONAL SERVICES AGREEMENT**

(version 9-29-2021)

This AGREEMENT ("Agreement") is entered by and between **Ardurra** (the "Professional"), located at **3115 Allen Parkway, #300, Houston, TX 77019** and the **City of League City** ("City"), a home-rule municipality, located at 300 W. Walker St., League City, Texas 77573 on the date set forth below.

### **Terms:**

1. **Scope of Services:** Professional will perform the services as set forth in **Exhibit A**, which is attached and incorporated herein, and which can be generally described as **Engineering Services**. Services related to design, bid, or construction of a public work shall conform to the requirements set forth in **Exhibit B**, if applicable. If there is a conflict between the terms of this Agreement and Exhibits A (or B, if applicable), the terms of this Agreement will prevail.
2. **Term and Termination:** This Agreement shall commence on **June 14, 2022** and shall expire on **April 17, 2023**. City reserves the right to terminate this Agreement for convenience upon seven (7) days written notice to Professional. Upon such termination, City shall pay Professional, at the rate set out in **Exhibit A**, for services satisfactorily performed up through the date of termination. Notwithstanding any provision in this Agreement to the contrary, City will not be required to pay or reimburse Professional for any services performed or for expenses incurred by Professional after the date of the termination notice that could have been avoided or mitigated by Professional.
3. **Compensation:** Professional shall be paid for the services as set forth in **Exhibit A**. In no event shall the total compensation exceed **\$128,070.00 (One hundred twenty-eight thousand seventy dollars and zero cents)** during the term of this Agreement. City shall tender payment (including progress/partial payments) for services only after such services are completed and are deemed to be acceptable under this Agreement, in the sole reasonable discretion of City. Professional must submit to City invoices for all services provided, which invoices must include details and dates of service. Payment by City shall be made within thirty (30) days of receipt of an invoice, except for any portion of the invoiced amount that City disapproves as not compliant under this Agreement, in the sole reasonable discretion of City. If City disapproves any amount submitted for payment by Professional, City shall give Professional specific reasons for disapproval in writing.
4. **Insurance:** Professional is required during the Contract Term to maintain insurance as set forth below:
  - (a) Comprehensive General Commercial Liability insurance covering bodily injury and property damage, with minimum coverage limits—exclusive of defense costs—of \$1,000,000 per occurrence and \$2,000,000 aggregate;
  - (b) Professional Liability (errors and omissions/malpractice) insurance with minimum coverage limits—exclusive of defense costs—of \$2,000,000 per occurrence; and
  - (c) If at any point during the Contract Term it is foreseeable that Professional will enter upon City premises:
    - (i) Worker's Compensation coverage with statutory limits for the State of Texas, and
    - (ii) Commercial

Automobile Liability coverage with minimum coverage limits—exclusive of defense costs—of \$1,000,000 per occurrence and \$2,000,000 aggregate.

All policies must contain a waiver of subrogation against City. Comprehensive General Liability and Commercial Automobile Liability policies must name the City as Additional Insured. Professional shall pay all insurance deductibles and deductibles must not exceed \$10,000 unless approved in advance by City. Professional shall provide City Certificates of Insurance evidencing these insurance requirements prior to the start of work.

5. **Liquidated Damages:** *(Not applicable for this project.)* Professional acknowledges that time is of the essence in performing this Agreement. City and Professional (collectively, the “Parties”) agree that if Professional is late in performing any service designated as Time Critical on the Scope of Services attached to this Agreement, City will suffer loss, damages, or other harm from Professional’s delay. The Parties agree that the amount of loss, damages, or harm likely to be incurred as a result of Professional’s delay is incapable or difficult to precisely estimate, and therefore the Parties desire to stipulate the amount of such loss, damages, or harm. Accordingly, Professional shall have deducted from any amounts owed under this Agreement liquidated damages equal to the number of calendar days of the delay(s) times the daily rate, which rate shall be one-tenth of one percent (0.1%) times the compensation shown in the Scope of Services for such Time Critical service. The Parties further agree that: (i) the liquidated damages specified herein are not a penalty but rather bear a reasonable relationship to, and is not plainly or grossly disproportionate to, the probable loss likely to be incurred by City as a result of Professional’s delay; (ii) one of the reasons for City and Professional to agree to such amounts is the uncertainty and cost of litigation regarding the question of actual damages; and (iii) City and Professional are sophisticated business parties and negotiated this Agreement at arm’s length.
6. **Independent Professional:** Professional is an independent Professional and is not an employee, partner, joint venture, or agent of City. Professional understands and agrees that he/she will not be entitled to any benefits generally available to City employees. Professional shall be responsible for all expenses necessary to carry out the services under this Agreement and shall not be reimbursed by City for such expenses except as otherwise provided in this Agreement.
7. **Intellectual Property:** This Agreement shall be an Agreement for services and the parties intend and consider any work created as a result of this Agreement, including any and all documentation, images, products or results, to be a work (the “Work”) for hire under federal copyright law. Ownership of the Work shall belong to and remain the exclusive property of City. The Work may be edited at any time within City’s discretion. If the Work would not be considered a work-for-hire under applicable law, Professional hereby assigns, transfers, and conveys any and all rights, title and interest to City, including without limitation all copyrights, patents, rights of reproduction, rights to ownership, and right to secure registrations, renewals, reissues and extensions thereof. As the sole copyright holder of the Work, City maintains and asserts the rights to use, reproduce, make derivative works from, and/or edit the Work in any form of medium, expression or technology now known or hereafter developed, at any time within City’s discretion. Professional shall not sell, disclose or obtain any other compensation for the services provided herein or the Work. If the Work is one to which the provisions of 17 U.S.C. § 106A apply, Professional hereby waives and appoints City to assert on Professional’s behalf Professional’s moral rights or any equivalent rights regarding the form or extent of any alteration to the Work (including, without limitation, removal or destruction) or the making of any derivative works based on the Work, including, without limitation, photographs, drawings or other visual reproductions of the work, in any medium, for City’s purposes.
8. **Confidentiality:** During the course of the services to be provided under this Agreement, Professional may become privy to confidential information of City. Professional agrees to treat as confidential the information or knowledge that becomes known to Professional during performance of this Agreement and to not use, copy, or disclose such information to any third party unless authorized in writing by City. This provision does not restrict the disclosure of any information that is required to be disclosed under applicable law. Professional shall promptly notify City of any misuse or unauthorized disclosure of City’s confidential information and upon expiration of this Agreement shall return to City all confidential information in Professional’s possession or control. Professional shall further comply with all information



security policies of City that may apply and shall not make any press releases, public statements or advertisement referring to the services provided under this Agreement or the engagement of Professional without the prior written approval of City.

9. **Warranties and Representations:** Professional warrants and agrees that Professional shall perform its services and conduct all operations in conformity with all applicable federal, state, and local laws, rules, regulations, and ordinances. For any service performed on premises owned or controlled by City, Professional warrants and agrees that Professional will perform said services in compliance with all City rules, including but not limited to, prohibitions related to tobacco use, alcohol, and other drugs.
10. **Licenses/Certifications:** Professional represents and warrants that it will obtain and maintain in effect, and pay the cost of, all licenses, permits or certifications that may be necessary for Professional's performance of this Agreement. If Professional is a business entity, Professional warrants, represents, covenants, and agrees that it is duly organized, validly existing and in good standing under the laws of the state of its formation; and is duly authorized and in good standing to conduct business in the State of Texas, that it has all necessary power and has received all necessary approvals to execute and deliver the Agreement and is authorized to execute this Agreement according to its terms on behalf of Professional.
11. **Performance/Qualifications:** Professional agrees and represents that Professional has the personnel, experience, and knowledge necessary to qualify Professional for the particular duties to be performed under this Agreement. Professional warrants that all services performed under this Agreement shall be performed consistent with generally prevailing professional or industry standards.
12. **Conflict of Interest:** Professional warrants, represents, and agrees that Professional presently has no interest and shall not acquire any interest, direct or indirect, that would conflict in any manner or degree with Professional's performance of the services hereunder. Professional further warrants and affirms that no relationship or affiliation exists between Professional and City that could be construed as a conflict of interest with regard to this Agreement.
13. **INDEMNIFICATION: PROFESSIONAL SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS CITY , AND EACH OF ITS OFFICIALS, OFFICERS, AGENTS AND EMPLOYEES FROM AND AGAINST ALL CLAIMS, ACTIONS, SUITS, DEMANDS, PROCEEDINGS, COSTS, DAMAGES AND LIABILITIES, INCLUDING WITHOUT LIMITATION ATTORNEYS' FEES AND REASONABLE LITIGATION COSTS, ARISING OUT OF, CONNECTED WITH, OR RESULTING FROM ANY ACTS OR OMISSIONS OF PROFESSIONAL OR ANY AGENT, EMPLOYEE, SUBCONTRACTOR, OR SUPPLIER OF PROFESSIONAL IN THE EXECUTION OR PERFORMANCE OF THIS CONTRACT, TO THE EXTENT THE CLAIM ARISES FROM NEGLIGENCE, WILLFUL ACT, BREACH OF CONTRACT OR VIOLATION OF LAW.**
14. **Force Majeure:** Neither party shall be liable to the other for (i) any delay in performance; (ii) any other breach; (iii) any loss or damage; or (iv) any contribution to or aggravation of any of the foregoing; arising solely from uncontrollable forces such as fire, theft, storm, war, or any other cause that could not have been reasonably avoided by the party's exercise of due diligence.
15. **Notices:** Any notice given under this Agreement by either party to the other may be affected either by personal delivery in writing or by mail, registered or certified postage prepaid with return receipt requested. Mailed notices shall be addressed to the addresses of the Parties as they appear in the contract. Notices

delivered personally shall be deemed communicated at the time of actual receipt. Mailed notices shall be deemed communicated three (3) days after mailing.

16. **Texas Family Code Child Support Certification:** Pursuant to Section 231.006 of the Texas Family Code, Professional certifies that it is not ineligible to receive the award of or payments under the Agreement and acknowledges that the Agreement may be terminated, and payment may be withheld if this certification is inaccurate.
17. **State Auditor:** Professional understands that acceptance of funds under the Agreement constitutes acceptance of the authority of the Texas State Auditor's Office, or any successor agency (collectively, the "Auditor"), to conduct an audit or investigation in connection with those funds. Professional agrees to cooperate with the Auditor in the conduct of the audit or investigation, including without limitation providing all records requested. Professional will include this provision in all contracts with permitted subprofessionals.
18. **Jurisdiction:** Any disputes under this Agreement shall be brought in a court of competent jurisdiction in Galveston, Texas and governed by Texas law.
19. **Alternative Dispute Resolution:** To the extent that Chapter 2260, Texas Government Code, is applicable to this Contract and is not preempted by other applicable law, the dispute resolution process provided for in Chapter 2260 and the related rules adopted by the Texas Attorney General Pursuant to Chapter 2260, shall be used by City and Professional to attempt to resolve any claim for breach of contract made by Professional that cannot be resolved in the ordinary course of business. The Director of Finance of City shall examine Professional's claim and any counterclaim and negotiate with Professional in an effort to resolve such claims. This provision shall not be construed as a waiver by City of its right to seek redress in the courts.
20. **Entire Agreement:** This Agreement contains the entire understanding between the Parties and supersedes all prior agreements, arrangements, and understanding, oral or written between the Parties relating to this Agreement. This Agreement may not be modified except by mutual written agreement of the Parties executed subsequent to this Agreement.
21. **Eligibility to Receive Payment:** Professional certifies that, as a matter of state law, it is not ineligible to receive the Agreement and payments pursuant to the Agreement and acknowledges that the Agreement may be terminated, and payment withheld if this representation is inaccurate.
22. **Payment of Debt/Delinquency to State:** Professional certifies that it is not indebted to the City of League City and is current on all taxes owed to the City of League City. Professional agrees that any payments owing to Professional under the Agreement may be applied directly toward any debt or delinquency that Professional owes the City of League City regardless of when it arises, until such debt or delinquency is paid in full.
23. **Products and Materials Produced in Texas:** If Professional will provide services under the Agreement, Professional covenants and agrees that in performing its duties and obligations under the Agreement, it will purchase products and materials produced in Texas when such products and materials are available at a price and delivery time comparable to products and materials produced outside of Texas.
24. **Risk of Loss:** All work performed by Professional pursuant to the Agreement will be at Professional's exclusive risk until final and complete acceptance of the work by City. In the case of any loss or damage to the work, or the need to redo or revise the work for any reason except to accommodate a City request to materially alter the work, prior to City's acceptance, bearing the costs of such loss or damage to or such redo or revision of the work will be Professional's responsibility.
25. **Publicity:** Professional shall not use City's name, logo or likeness in any press release, marketing materials or other public announcement without receiving City's prior written approval.



26. **Legal Construction/Severability:** In the event that any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision, and this Agreement shall be construed as if such invalid, illegal or unenforceable provisions had never been contained in it. To this end, the provisions of this Agreement are declared to be severable. The Parties may mutually agree to renegotiate the Agreement to cure such illegality/invalidity or unconstitutionality if such may be reasonably accomplished.
27. **Limitations:** The Parties are aware that there are constitutional and statutory limitations on the authority of City to enter into certain terms and conditions of the Agreement, including, but not limited to, those terms and conditions relating to liens on City's property; disclaimers and limitations of warranties; disclaimers and limitations of liability for damages; waivers, disclaimers and limitations of legal rights, remedies, requirements and processes; limitations of periods to bring legal action; granting control of litigation or settlement to another party; liability for acts or omissions of third parties; payment of attorneys' fees; dispute resolution; indemnities; and confidentiality (collectively, the "Limitations"). Any terms and conditions related to the Limitations will not be binding on City except to the extent authorized by the laws and Constitution of the State of Texas.
28. **Sovereign Immunity:** The Parties agree that neither the execution of the Agreement by City nor any other conduct, action or inaction of any City representative relating to the Agreement constitutes a waiver of sovereign immunity by City.
29. **Authority:** Professional warrants and represents that Professional has full power and authority to enter into and perform this Agreement and to make the grant of rights contained herein. The person signing on behalf of City represents that he/she has authority to sign this Agreement on behalf of City.
30. **Non-Waiver:** The Parties specifically agree that neither the occurrence of an event giving rise to a breach of contract claim nor the pendency of a claim constitute grounds for the suspension of performance by Professional. No covenant or condition of this Agreement may be waived except by written consent of the waiving party. Forbearance or indulgence by one party in any regard whatsoever shall not constitute a waiver of the covenant or condition to be performed by the other party.
31. **Prohibitions Pursuant to Texas Government Code:** By executing this Agreement Professional verifies that Profession (1) does not boycott Israel and will not during the term of this Agreement per Section 2274.002; (2) is not engaged in business with Iran, Sudan, or any company on the list referenced in Section 2252.152; (3) does not boycott energy companies and will not during the term of this Agreement per 2274.002; and (4) does not have a practice, policy, guidance, or directive of this Agreement against a firearm entity or firearm trade association and will not during the term of this Agreement per 2274.002.

*(signature block on next page)*

Executed on \_\_\_\_\_, *(date to be filled in by City Secretary)*

**ARDURRA - "Professional"**

  
\_\_\_\_\_  
Jeffrey C. Peters, PE, BCEE

**CITY OF LEAGUE CITY - "City"**

\_\_\_\_\_  
John Baumgartner, City Manager

**Attest:**

\_\_\_\_\_  
Diana Stapp, City Secretary

**Approved as to Form:**

\_\_\_\_\_  
Office of the City Attorney

# Exhibit A

## Scope of Services/Description of Products/Payment Schedule (20 pages, including this page)

WW2202 Reuse Feasibility Study

- Project Management
- Data Collection
- See Attachment

## Exhibit B

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May 26, 2022



Mrs. Cara Davis  
City of League City  
Assistant Director  
Project Management  
300 West Walker St.  
League City, Texas 77573

Subject: Proposal for Professional Engineering Services  
Reuse Master Plan Update

Dear Mrs. Davis:

Engineering  
& Disaster  
Management

Ardurra takes great pride to have had the previous opportunities to partner with the City of League City to provide professional services for the City and its residents. We appreciate the opportunity to continue this partnership through the subject project.

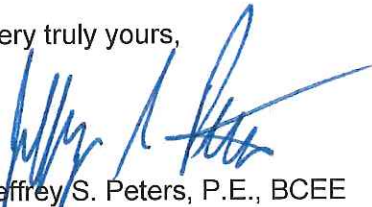
Please find the attached **Exhibit A – Scope of Services** which entails a detailed scope to provide professional engineering services to update the Reuse Master Plan which will examine opportunities to reduce potable water demand by augmenting with treated and regulated reclaimed water.

Based on the scope of services and schedule included in **Exhibit A**, we propose to complete the work for the amounts listed below:

Basic Services	\$123,070.00
Additional Services	\$5,000.00
<b>Total Contract Amount</b>	<b>\$128,070.00</b>

We look forward to beginning work on this important project and appreciate the opportunity to serve the City of League City. If you have any questions or require additional information, please contact me via cell phone at 713-385-5601.

Very truly yours,

  
Jeffrey S. Peters, P.E., BCEE  
Client Service Leader  
TBPE Firm Registration No F-17004

## Exhibit A Detailed Scope of Services



### Exhibit A-1 Further Description of Engineering Services and Related Matters Detailed Scope of Services For City of League City 2022 Reuse Master Plan Update

#### Project Understanding

The City of League City's current Reuse Feasibility Analysis was completed in 2014 by CDM Smith. Since the completion of this plan, improvements to the reuse infrastructure and growth of potential reuse customers have occurred. These improvements, coupled with continued growth within the City over the past 8 years, necessitates the commissioning and completion of an updated wastewater reuse master plan.

The City's objective and expectations are to seek and evaluate economical and environmentally friendly means of reducing potable water consumption while at the same time reducing the long-term cost to the City of League City. As such, the City of League City has actively engaged Engineer to perform a systematic feasibility study of the potential opportunities for conservation and water reuse. The report will be executed in four (4) phases as follows:

1. Data Collection and Analysis
2. Identification of potential users and subsequent planning cost to serve
3. Development of an implementation (phasing) plan
4. Final Report and Exhibit production

A detailed list of tasks that describe the steps and activities of the scope in detail follows in the below sections. The findings and conclusions of each of the tasks will be documented via technical memorandum and incorporated into sections of the overall Reuse Master Plan Update Report Update.

Engineer will utilize all data available from the previous Water and Wastewater Master Plans as well as new data provided by the City. The development and update of the Land Use Assumptions and growth projections is not a part of this project as it was completed under separate contract by Freese & Nichols, Inc.

## Exhibit A

### Detailed Scope of Services



The anticipated report sections and contents are briefly described below:

**Executive Summary** – Summary of data analysis, criteria, results, and recommendations.

**Section 1 - Introduction.** The project background, objectives, and scope are explained and the structure of the report presented.

**Section 2 - Texas Reuse Regulations and Procedures.** The TCEQ regulations and procedures related to treatment, distribution, and usage of reclaimed water are reviewed and summarized as applicable to League City.

**Section 3 – Data Review and Analysis.** Discussion of AMI meter data, GIS, facility information, usage, contracts, and other data requested and review and summarize findings accordingly.

**Section 4 – Potential Reuse Customers and Reclaimed Water Demand.** This section:

- identifies the existing and potential reclaimed water users and their demand, required water quality, type of customer, and the applicable requirements pertaining to their customer classification; and
- identifies criteria for servicing reclaimed water users.

**Section 5 – Summary of Existing and Proposed Reuse Infrastructure & Projects.** This section identifies:

- the existing and proposed reuse infrastructure needed to serve proposed reuse customers;
- any potential decommissioned potable facilities that could be re-purposed for a reuse system; and
- potential projects to serve identified potential reuse customers.

**Section 6 – Reclaimed Water System Cost Analysis.** This section explains the procedure used to develop the project costs and identification of the top projects and the implementation of the projects using a “phased approach” where warranted including providing a potential projects evaluation matrix.



# Exhibit A

## Detailed Scope of Services



### Specific Scoping Tasks

#### 1. Project Management

- 1.1. Conduct a project initiation meeting to identify critical success factors, discuss client and political drivers, and establish a clear set of objectives for the project based on client input as well as understanding what information and data is available.
- 1.2. Coordinate with staff and project personnel to complete project tasks and meet project objectives.
- 1.3. Conduct progress meetings with City staff and provide appropriate and necessary documentation.
- 1.4. Develop and maintain a project schedule with detailed milestones.
- 1.5. Provide quality control reviews and technical reviews of all evaluations and recommendations, technical memoranda, and reports.
- 1.6. Work with City Project Manager (and other designated City personnel) to coordinate City reviews of technical memorandums and the final report. Work with internal project team to document and incorporate City comments.

#### 2. Data Collection

##### 2.1. Data Request, Review, Analysis, and Summary

- 2.1.1. Data Request – Engineer will prepare a data request memorandum and submit to the City's project manager. Typical information will include AMI metering data, current reuse customer database, future development land use, effluent test reports, GIS files, CIP, etc.
- 2.1.2. Data Review – Once received, Engineer will review all submitted data for completeness, accuracy, project relevancy and importance and utilize supplied data for data analysis
- 2.1.3. Data Analysis – Review of current reuse customers, contracts, existing non-residential water demands and other data to identify information useful in the analysis
- 2.1.4. Review of current WWTP flows & effluent data
- 2.1.5. Review of existing information, including the data analyses, proposed, platted, approved developments to assess reuse potential

##### 2.2. Deliverables



## Exhibit A

### Detailed Scope of Services



- 2.2.1. Workshop #1: Present results of data collection, inputs for demand data development, summary notes of workshop #1.
- 2.2.2. Technical Memo #1.

#### 2.3. City Staff Involvement:

- 2.3.1. Provide copies or access to the reports and data sets listed in the data request memorandum and other information listed above
- 2.3.2. Participation in Workshop #1
- 2.3.3. Review Technical Memo #1

### 3. Identify Potential Reuse Customers

- 3.1. Engineer will utilize data provided by the City to develop existing and potential reuse customers utilizing potable water usage as well as the Future Land Use Plan Update and Land Use Assumptions and potential reuse demands based on planned land uses.
- 3.2. Engineer will identify new reclaimed water users including potential capacity/demand of the potential reclaimed water customer utilizing existing irrigation meter data, required water quality, customer classification/type, and the applicable requirements pertaining to their customer classification. Engineer will summarize as many as the top 100 potential users and provide a graphical overlay of the locations.
- 3.3. Deliverables
  - 3.3.1. Workshop #2: Review findings of potential reuse customers.
  - 3.3.2. Technical Memo #2.
- 3.4. City Staff Involvement:
  - 3.4.1. Participation in Workshop #2
  - 3.4.2. Review Technical Memo #2.

## Exhibit A

### Detailed Scope of Services



#### 4. Grading and Ranking of Potential Users

- 4.1. The individual potential users will be grouped into potential projects to serve groups of users. Engineer will develop infrastructure requirements for reaching each group of users identified utilizing review of storage facilities and linear assets available to be re-purposed for reuse. Engineer will determine extent of new infrastructure required to reach the group of assets. This analysis will be used to inform ranking metrics and cost effectiveness analysis.
- 4.2. Using the list of potential projects, Engineer will identify opportunities and challenges for servicing potential groups of users. Some of the users may fall out of the analysis due to the abundance of disadvantages. For the remaining users, Engineer will use a set of criteria to evaluate each of the groups of potential users. The criteria may include:
  - 4.2.1. Economics
  - 4.2.2. Water savings potential
  - 4.2.3. Project reliability
  - 4.2.4. Operations requirements
  - 4.2.5. Proximity to existing/viable reuse infrastructure
  - 4.2.6. Constructability
  - 4.2.7. Permitting requirements
  - 4.2.8. Current WWTP effluent quality
  - 4.2.9. Additional treatment requirements to meet user quality
- 4.3. A matrix will be developed where each user will be ranked on the above individual criteria. The top five projects will move on to the Cost-Effective Analysis and Phasing Implementation Plan in the following task.
- 4.4. Deliverables
  - 4.4.1. Workshop #3: Present findings of projects and rankings & gain concurrence on top five (5) projects to move on to Cost-Effective Analysis.
  - 4.4.2. Technical Memo #3.



## Exhibit A

### Detailed Scope of Services



#### 4.5. City Staff Involvement:

- 4.5.1. Participation in Workshop #3
- 4.5.2. Review Technical Memo #3.

### 5. Cost Effectiveness Analysis and Phasing Implementation Plan

- 5.1. Comparative cost ranking: Although these efforts of determining broad brush feasibility of reuse projects do not warrant specific cost estimates, it is prudent to estimate comparatively which of the projects is least in estimated costs versus the highest in estimated costs. Cost estimates for each project will be developed in a cost per gpd. The cost and other metrics developed in the previous task will be utilized to identify "low hanging fruit."
- 5.2. Engineer will provide a continuum of the lowest to highest cost projects of those identified as the "Top 5 Projects." In addition, there will be discussion of the items/factors that make up the costs. Discussion to include the biggest financial hurdles and the projects that would have the highest operational savings including the identification the most costs avoided by not having to provide treated surface water capacity.
- 5.3. Projected Water Savings
  - 5.3.1. The ultimate potable water system demand for the upcoming 20-year period will be obtained from the Water Master Plan Update and modified for the two cases with and without implementation of the reclaimed water system.
  - 5.3.2. Determine total estimated potential volume from irrigation use in developed and undeveloped areas of the City. Based on those findings identify infrastructure requirements, planning level costs, regulatory, and policy challenges to implement reuse irrigation infrastructure required for new homes. Additionally, discuss options for utilization of HOA ponds for irrigation needs for potential future detailed study. Savings models will incorporate easily quantifiable irrigation restrictions such as odd/even days.
  - 5.3.3. Projected water savings calculations will also include potential revenue from the sale of reuse water, both at retail level and wholesale. Retail revenue will utilize current water rates or fraction thereof. Wholesale revenue will utilize current BRA system rates for firm water.

## Exhibit A

### Detailed Scope of Services



#### 5.4. Deliverables

5.4.1. Workshops #4 & #5: Discuss regulatory and policy requirements of reuse implementation on various levels to develop comparison criteria. Present findings of the cost-effective analysis & gain concurrence on projects worthy of recommendations and implementation.

5.4.2. Technical Memo #4.

#### 5.5. City Staff Involvement:

5.5.1. Participation in Workshops #4 & #5

5.5.2. Review Technical Memo #4

### 6. Limitations

6.1. The Reuse Master Plan Update includes determining feasibility of off-setting capital costs of acquiring and constructing additional treated surface water. Contemplation of a separate reuse utility, reuse rates, and detailed preliminary engineering reports is reserved for future studies.

### 7. Deliverables

7.1. Engineer will provide a consolidated report comprised of the content contained in each technical memo as well as other content (executive summary, introduction, regulatory summary, exhibits) for City of League City review. Engineer will then address review comments and finalize the final report.

### 8. Meetings and Project Management

8.1. Engineer will attend meetings with City of League City to discuss progress of the project and to review tasks throughout the project. Five meetings/workshops are budgeted to be held with City of League City as follows:

#### 8.2. Meetings

8.2.1. Kickoff meeting to refine scope and develop a project specific action plan.

8.2.2. Four workshops to discuss findings of technical memorandums or specific data gathering tasks in order to gain concurrence and move forward.

## Exhibit A

### Detailed Scope of Services



#### 9. Schedule

- 9.1. Project Management – Project management activities will commence at project kick-off and continue through to final deliverable
- 9.2. Data Collection and Analysis
  - 9.2.1. Data Request Memo – 5 days from NTP
  - 9.2.2. Workshop #1 – 30 days after receipt of all requested data
  - 9.2.3. Technical Memo #1 - 15 days after Workshop #1
- 9.3. Identification of potential users and subsequent planning cost to serve
  - 9.3.1. Identify Potential Reuse Customers
    - 9.3.1.1. Workshop #2 – 30 days after completion of TM #1
    - 9.3.1.2. Technical Memo #2 - 15 days after Workshop #2
  - 9.3.2. Grading and Ranking of Potential Users
    - 9.3.2.1. Workshop #3 – 30 days after completion of TM#2
    - 9.3.2.2. Technical Memo #3 - 15 days after Workshop #3
- 9.4. Development of an implementation (phasing) plan
  - 9.4.1. Workshop #4 – 30 days after completion of TM#3
  - 9.4.2. Technical Memo #4 - 15 days after Workshop #4
- 9.5. Final Report and Exhibit Production
  - 9.5.1. Draft Report – 21 days after completion of TM#4
  - 9.5.2. Final Report – 14 days after receipt of review comments of Draft Report.

#### 10.0 Level of Effort and Fees Presented in Tables A-1 and A-2





Exhibit A  
Detailed Scope of Services



Table A-1  
Further Description of Engineering Services and  
Related Matters Detailed Scope of Services  
For  
City of League City  
2022 Reuse Master Plan Update and

Summary of Services and Fees

Task No.	Task Description	Lump Sum Amount
1	Project Management	\$11,530.00
2	Data Collection and Analysis	\$22,640.00
3	Identification of Potential Reuse Customers and Planning Cost to Serve	\$20,500.00
4	Development of an Implementation (phasing) plan	\$28,660.00
5	Final Report and Exhibit Production	\$39,740.00
<b>SubTotal</b>		<b>\$123,070.00</b>
	Additional Services	\$5000.00
<b>Total</b>		<b>\$128,070.00</b>



ARDURRA

[https://ardurra.sharepoint.com/shared documents/projects/00000 league city/00000-00 reuse master plan update/01 project mgmt/02 contract/01 ardurra/01 scope/exhibit a - reuse scope v2.0 - copy.docx](https://ardurra.sharepoint.com/shared%20documents/projects/00000%20league%20city/00000-00%20reuse%20master%20plan%20update/01%20project%20mgmt/02%20contract/01%20ardurra/01%20scope/exhibit%20a%20-%20reuse%20scope%20v2.0%20-%20copy.docx)

## Exhibit A Detailed Scope of Services



Table A-2  
Further Description of Engineering Services and  
Related Matters Detailed Scope of Services  
For  
City of League City  
2022 Reuse Master Plan Update and

### Hourly Labor Rates

Labor Category	Hourly Rate
Principal/Sr. Proj. Manager	\$290
Sr. Tech Specialist (QA/QC)	\$275
Engineer 7	\$240
Engineer 5/6	\$200
Engineer 3/4	\$175
Engineer 1/2	\$150
Senior Designer/Drafter	\$150
GIS Technician	\$120
Contract/Accounting Specialist	\$120
Administration Assistance/Word Processor	\$90

## Exhibit A-1 Level of Effort Fee Estimate

Project: City of League City Water Reuse Master Plan Update  
 Consultant: Ardurra

			Ardurra Estimated Man-hours				Ardurra - Total Hours	Ardurra Subtotal Labor Cost	ODCs	Ardurra Subtotal
Task	Subtask	Task Description	Position	Project Manager	Graduate Engineer	Word Processor	Contract Admin			
Rate				\$ 290.00	\$ 150.00	\$ 90.00	\$ 120.00	(Hrs)	(\$)	(\$)
<b>BASIC SERVICE TASKS</b>										
<b>1.0 - PROJECT MANAGEMENT AND COORDINATION (LS)</b>										
1	1.1	Project Initiation Meeting	2	2				4	\$ 880.00	\$ 880.00
1	1.3	Progress Meetings (3)	8	10	0			18	\$ 3,820.00	\$ 3,820.00
		Council Meeting Presentation (1)	4	6				10	\$ 2,060.00	\$ 2,060.00
		Project Management	4	16			8	28	\$ 4,520.00	\$ 4,520.00
			18	34	0	8	60	\$ 11,280.00	\$ 250.00	\$ 11,530.00
<b>2.0 - DATA COLLECTION (LS)</b>										
2	2.1	Data Request Review, Analysis and Summary		2				2	\$ 300.00	\$ 300.00
	2.1.1	Data Request		8				8	\$ 1,200.00	\$ 1,200.00
	2.1.2	Data Review		60				60	\$ 9,000.00	\$ 9,000.00
	2.1.3	Data Analysis		16				16	\$ 2,400.00	\$ 2,400.00
	2.1.4	Review of WWTP Flows and Effluent Quality		20				20	\$ 3,000.00	\$ 3,000.00
	2.1.5	Review of existing development information		5	7			12	\$ 2,500.00	\$ 2,500.00
	2.2.1	Workshop #1	4	16	2			22	\$ 3,740.00	\$ 3,740.00
	2.2.1	TM #1	9	129	2	0	140	\$ 22,140.00	\$ 500.00	\$ 22,640.00
<b>3.0 - IDENTIFY POTENTIAL REUSE CUSTOMERS (LS)</b>										
3	3.1	Potential Reuse Customer Identification	4	20				24	\$ 4,160.00	\$ 4,160.00
3	3.2	Potential Reuse Customer Demand Locations		50				50	\$ 7,500.00	\$ 7,500.00
3	3.3.1	Workshop 2	5	7				12	\$ 2,500.00	\$ 2,500.00
	3.3.2	TM#2	4	30	2			36	\$ 5,840.00	\$ 5,840.00
			13	107	2	0	122	\$ 20,000.00	\$ 500.00	\$ 20,500.00
<b>4.0 - GRADING AND RANKING OF POTENTIAL USERS (LS)</b>										
4	4.1	Potential Project Development	10	50				60	\$ 10,400.00	\$ 10,400.00
		Criteria Evaluation	2	40				42	\$ 6,580.00	\$ 6,580.00
		Project Matrix Ranking	4	20				24	\$ 4,160.00	\$ 4,160.00
		Workshop #3	5	7				12	\$ 2,500.00	\$ 2,500.00
		TM #3	4	20	4			28	\$ 4,520.00	\$ 4,520.00
			25	137	4	0	166	\$ 28,160.00	\$ 500.00	\$ 28,660.00
<b>5.0 - Cost Effectiveness Analysis and Phasing Implementation Plan (LS)</b>										
5	5.1	Cost Estimate Development (cost per gpd) and Comparative Cost	6	80				86	\$ 13,740.00	\$ 13,740.00
		Ranking	12	48				60	\$ 10,680.00	\$ 10,680.00
		Projected Water Savings	5	7				12	\$ 2,500.00	\$ 2,500.00
		Workshop 4	5	7				12	\$ 2,500.00	\$ 2,500.00
		Workshop 5	4	20	4			28	\$ 4,520.00	\$ 4,520.00
		TM #4	2	16	4			22	\$ 3,340.00	\$ 3,340.00
		Draft Final Report	2	8	2			12	\$ 1,960.00	\$ 1,960.00
		Final Report	36	186	10	0	232	\$ 39,240.00	\$ 500.00	\$ 39,740.00
<b>TOTAL BASIC SERVICES</b>			101	593	18	8	720	\$ 120,820.00	\$ 2,250.00	\$ 123,070.00
<b>ADDITIONAL SERVICE TASKS</b>										
		ADDITIONAL SERVICES						0	\$ 5,000.00	\$ 5,000.00
<b>TOTAL ADDITIONAL SERVICES</b>			0	0	0	0	0	\$ 5,000.00	\$ -	\$ 5,000.00
<b>TOTAL CONTRACT AMOUNT</b>			101	593	18	8	720	\$ 125,820.00	\$ 2,250.00	\$ 128,070.00



## v7 Include

Strategic Plan Draft 7 - Director Approval

CSF	Initiative	Considerations	Recommendation	Comments or Original Wording	Owner	Status
	<b>1.1 Secure water supply for buildout and implement Water Master Plan</b>				Jody Hooks	
		Utilize Opportunity Fund for infrastructure projects as applicable (CT)(HD)	1-Include	Create an "opportunity fund" for targeted infrastructure projects. (CT)(HD) Distributed to 4 initiatives	Jody Hooks	
		Investigate options for desalinization. (HD)	1-Include		Jody Hooks	
		Investigate the possibility of implementing irrigation restrictions and using HOA ponds to irrigate. (HD)	1-Include		Jody Hooks	
		Investigate water re-use potential. (HD)	1-Include		Jody Hooks	
		Invest CDBG funding as applicable (HD)	1-Include	Repeated 9 times	Jody Hooks	
		Require purple pipe and re-useable water infrastructure to be built with new homes (HD, JB)	1-Include	Moved from 8.1 (David)	Jody Hooks	