

#### PROFESSIONAL SERVICES AGREEMENT

(version 1-7-2021)

This AGREEMENT ("Agreement") is entered by and between **CDM Smith Inc.** (the "Professional"), located at **11490 Westheimer Road, Suite 700, Houston, Texas 77077** 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 to provide engineering design and construction services for the upgrade of the DSWWTP SCADA system, specifically the obsolete PLC controllers. Additionally, the project includes upgrade to the HMI software (iFix) to the latest version. This upgrade must be performed in a timely fashion as it is critical to promote a cybersecure system. The scope of work includes CDM Smith assistance in installing and incorporating iFix, XL Reporter and WIN-911 software into the City's existing SCADA system. Services related to design, bid, or construction of a public work shall conform to the requirements set forth in **Exhibit B**. If there is a conflict between the terms of this Agreement and Exhibits A or B, the terms of this Agreement will prevail.
- 2. **Term and Termination:** This Agreement shall commence on **June 8, 2021** and shall expire on **December 31, 2022** 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 <a href="Exhibit A">Exhibit A</a>. In no event shall the total compensation exceed \$365,380 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: 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.
- 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. Notwithstanding any other provisions of this Agreement to the contrary, Professional shall retain its rights in its pre-existing standard drawing details, designs, specifications, databases, computer software, proprietary information, documents, templates, and any other property owned by Professional on the date of this Agreement or developed outside of this Agreement.
- 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 **ALL** CLAIMS, ACTIONS, SUITS, AGAINST 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 MISCONDUCT, 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. **Prohibition on Boycotting Israel:** Pursuant to Section 2270.002 of the Texas Government Code, by executing this Agreement Professional verifies that Professional: (1) does not boycott Israel; and (2) will not boycott Israel during the term of this Agreement.
- 32. **Prohibition Against Business with Iran, Sudan or Foreign Terrorists Organizations:** Professional warrants, covenants, and represents that Professional is not engaged in business with Iran, Sudan, or any company identified on the list referenced in Section 2252.152 of the Texas Government Code.

(signature block on next page)

| Executed on                                        | (date to be filled in by City Secretary) |
|----------------------------------------------------|------------------------------------------|
| CDM SMITH INC "Professional"                       |                                          |
| Sreg Shaw                                          |                                          |
| Gregory A. Shaw, P.E. Senior Client Service Leader |                                          |
| CITY OF LEAGUE CITY – "City"                       |                                          |
| John Baumgartner, ICMA-CM,P.E., 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

(8 pages, including this page)

See Attached Exhibit A

#### **EXHIBIT "A"**

# To Agreement between Owner and Engineer (Engineering Services for SCADA Upgrade)

This is an exhibit attached to and made a part of the Agreement dated \_\_\_\_\_ between the City of League City (City) and CDM Smith Inc. (Engineer) for professional services.

#### **PROJECT DESCRIPTION**

The Owner has requested the Engineer to provide engineering design and construction services for the upgrade of their SCADA system, specifically the obsolete PLC controllers. Additionally, the City would like to upgrade their HMI software (iFix) to the latest version. This upgrade must be performed in a timely fashion as it is critical to promote a cybersecure system. The scope of work includes CDM Smith assistance in installing and incorporating iFix, XL Reporter and WIN-911 software into the City's existing SCADA system.

The Dallas Salmon Wastewater Treatment Plant SCADA system consists of several SLC 5/05 controllers as listed below:

| LOCATION                    | PLC             | EQUIPMENT/PROCESS AREA    | MANUFACTURER  | PLC DETAILS/COMPONENTS  |
|-----------------------------|-----------------|---------------------------|---------------|-------------------------|
| SWITCHGEAR                  |                 |                           |               |                         |
| BUILDING EAST               | PLC-1           | INFLUENT LIFT STATION     | SCADA Panel   | SLC 5/05                |
|                             |                 | HEADWORKS                 |               | 16 input DI, DC link    |
|                             |                 | AERATION                  |               | 8 Isolated relay output |
|                             |                 |                           |               | analog input mod        |
| BLOWER MCP                  | 21 014/52 1 102 | 45047104                  |               | S. 0.5 (05              |
| BUILDING                    | BLOWER MCP      | AERATION                  | TURBLEX       | SLC 5/05                |
| BLOWER BUILDING             | BLOWER 1 LCP    | BLOWER 1                  | TURBLEX       | SLC 5/05                |
|                             | BLOWER 2 LCP    | BLOWER 2                  | TURBLEX       | SLC 5/05                |
| SWITCHGEAR<br>BUILDING WEST | PLC-2           | SECONDARY TREATMENT       | SCADA Panel   | SLC 5/05                |
|                             |                 | INTERMEDIATE PUMP STATION |               | 16 input 115VAC         |
|                             |                 | UV                        |               | 16 relay output         |
|                             |                 |                           |               | analog 8 input          |
|                             |                 |                           |               | analog 8 output         |
|                             | DISK FILTER 1   | DISK FILTER               | AQUA AEROBICS | SLC 5/05                |
|                             | DISK FILTER 2   | DISK FILTER               | AQUA AEROBICS | SLC 5/05                |
|                             | DISK FILTER 3   | DISK FILTER               | AQUA AEROBICS | SLC 5/05                |
|                             | DISK FILTER 4   | DISK FILTER               | AQUA AEROBICS | SLC 5/05                |
|                             | DISK FILTER 5   | DISK FILTER               | AQUA AEROBICS | SLC 5/05                |
|                             | DISK FILTER 6   | DISK FILTER               | AQUA AEROBICS | SLC 5/05                |
|                             | UV CHANNEL 3    | UV                        | WEDECO        | SLC 5/05                |

| SLUDGE DEWATERING |                   |                          |             |                    |
|-------------------|-------------------|--------------------------|-------------|--------------------|
| BUILDING          | PLC-3             | FILTERS                  | SCADA Panel | SLC 5/05           |
|                   |                   | BIO-SOLIDS TREATMENT     |             | 16 input 115VAC    |
|                   |                   | POLYMER                  |             | 16 output relay    |
|                   |                   | DEWATERING               |             | 8 analog input Mod |
|                   |                   | NON-POTABLE WATER SYSTEM |             |                    |
|                   | BELT FILTER PRESS |                          |             |                    |
|                   | 1                 | BELT FILTER PRESS        | SIEMENS     | SLC 5/05           |
|                   | BELT FILTER PRESS |                          |             |                    |
|                   | 2                 | BELT FILTER PRESS        | SIEMENS     | SLC 5/05           |
| UV BUILDING       | UV MCP            | UV                       | WEDECO      | SLC 5/05           |

These PLCs (Rockwell SLC 5/05's) are obsolete and must be replaced. The project will replace each SLC 5/05 in the plant SCADA panels (QTY=3) with a Rockwell CompactLogix PLC. The existing program from each SLC 5/05 will be re-written to be compatible with the new PLC architecture. The vendor panels (QTY=13) at Dallas Salmon plant are listed in the table above and are from 4 different vendors as noted. Each panel containing a SLC 5/05 (vendor and Plant SCADA) will need to be upgraded. Upgraded panels will generally utilize a Rockwell CompactLogix for vendor panels and for the Plant SCADA panels depending on the I/O requirements. The Engineer will coordinate with these vendors during design to identify a planned conversion. The vendors will be responsible to convert their programs and install their equipment upgrades in the field during startup and commissioning. The OIT displays in the vendor systems will also be replaced as a part of this project. The Contractor will carry each vendor as a sub-contractor for the project. This requirement will be incorporated in the specifications.

#### SCOPE OF SERVICES

#### Task 1 Project Kickoff and Data Collection

#### 1.1 Project Kickoff Meeting

The Engineer will participate in a project kickoff meeting with City staff to review scope elements, discuss project concerns/critical success factors, and confirm roles/responsibilities and overall schedule. Staff from the Engineer may participate in person or via Microsoft Teams pending date/time the meeting is scheduled. The Engineer will prepare the agenda for the meeting and distribute a meeting summary following the meeting. A detailed project schedule will be prepared in advance of the meeting and reviewed with the Owner during the kickoff meeting.

#### 1.2 Existing Data Review

The Engineer will research, review, and study record information, record drawings of existing system, existing PLC programs, and other pertinent information of the existing facilities within the project limits including any as-built information.

#### 1.3 Vendor Panel Coordination and Site Visit

The Engineer will coordinate the details of the vendor panel upgrades with both the Owner and vendor and include them as part of the design. Vendor systems and PLC system downtime limits will be discussed and established with the Owner's operation staff and incorporated as part of the design to confirm a smooth transition during construction. The following vendors are anticipated to perform system upgrades to their panels:

#### Turblex

Contact Name: Dennis Fishbeck

o Company: Howden Roots LLC/Hartwell Environmental

o Phone: (281) 799 - 2895

o Email: Vandy.Parthasarathy@howden.com/dfishbeck@Hartwellenv.com

#### Wedeco

o Contact Name: Lyle Milstead

o Company: Environmental Improvements, Inc.

Phone: 713-461-1111Email: lyle@ei2hou.com

#### • Siemens/Evoqua

Contact Name: Carleton SappCompany: Evoqua Western States

o Phone: 916 951 1706

o Email: carlton.sap@evaqua.com

#### • Agua Aerobics

Contact Name: Dennis Fishbeck

o Company: Hartwell Environmental Corp

o Phone: (281) 799 - 2895

o Email: dfishbeck@Hartwellenv.com

The Engineer will utilize existing P&IDs and specifications developed in 2008 as the basis for the I/O and control system functional requirements. The Engineer will review each vendor system and SCADA PLC control panel to develop a complete understanding of the overall system.

Immediately following the site walk, the engineer will conduct a meeting with the Owner and their key stake holders to discuss findings, ask questions, and identify any outstanding questions from the site review. The Engineer will develop a Site Visit Findings Report identifying any system issues and anomalies. The Site Visit Findings Report will provide field photos of each panel included in the scope of work and an outline summary of upgrades/additions required to update the panel/system. The site findings report will also

include any modifications identified to the existing Process and Instrumentation Diagram drawings (P&IDs) that are noted as part of the site visit.

#### Task 1 Work Products:

- Kickoff Meeting agenda and summary (.pdf format)
- Project baseline schedule(.pdf format).

#### Task 1 Deliverables:

• Site Visit Findings Report (.pdf format and up to two bound paper copies).

#### Task 1 Completion:

Task 1 will be considered complete upon submittal of the Site Visit Findings Report to the City.

#### **Task 2 Design Services**

#### **Design Document Preparation**

The Engineer will prepare and submit design documents that includes applicable drawings and specifications for the project. The existing drawings and specifications will be used as the design documents, modifying the date and project name. The Owner will supply relevant front-end specifications (Division 00) as required. The Engineer will use the set of P&IDs (as listed below, items 1-19) as the design documents. It is not anticipated that any new P&IDs will be created and would be considered out of scope.

The following drawings will be provided:

| Sheet<br>Number | Sheet Name                     |
|-----------------|--------------------------------|
| 1               | Cover Sheet                    |
| 2               | Index Sheet                    |
| 3               | Legend and Abbreviations       |
| 4               | System Architecture            |
| 5               | Influent Lift Station P&ID     |
| 6               | Headworks (1 of 2) P&ID        |
| 7               | Headworks (2 of 2) P&ID        |
| 8               | Blowers P&ID                   |
| 9               | Aeration Basins P&ID           |
| 10              | Secondary Treatment            |
| 11              | RAS/WAS Pump Station #1 P&ID   |
| 12              | RAS/WAS Pump Station #2 P&ID   |
| 13              | Intermediate Pump Station P&ID |

| 14 | Filters P&ID              |
|----|---------------------------|
| 15 | UV P&ID                   |
| 16 | Bio-Solids Treatment P&ID |
| 17 | Polymer Feed P&ID         |
| 18 | Sludge Dewatering P&ID    |
| 19 | Non-Potable Water P&ID    |

#### Task 2.1 60-Percent Design Submittal and Review (Design Development)

The Engineer will develop and provide design development 60% design phase work comprising the 60% Design Submittal. The 60% Design Submittal will consist of the following:

- 60% complete progress P&ID drawings as listed above with modifications to include the scoped SCADA upgrades.
- A table of contents of all anticipated contract and technical specifications
- The following 60% complete technical specifications: Process Control and Enterprise Management Systems General Provisions (406100), Operator Interface Terminals (406263), and Programmable Logic Controllers (406343)

The 60% Design Submittal will be provided in hard paper copy and .pdf format. Hard copies shall include one bound paper (1) full size (22"x34") set and two (2) half size (11"x17") paper sets of drawings and two (2) sets of bound paper copies of the Project Manual (8.5"x11").

The Engineer will meet with Owner to review 60-percent Design Submittal. The Owner shall provide one compiled set of comments to Engineer, at least 3 days prior to the 60-percent review meeting. This meeting will be attended in person by up to three (3) CDM Smith staff, including the Project Manager and the Lead Design Engineer. Others may attend virtually using Microsoft Teams. The Engineer will review comments and incorporate into the 90-percent submittal.

The Engineer will also develop a 60% Opinion of Probable Construction Cost (OPCC) based on vendor quotes and upgrades to the remaining PLCs. The 60% OPCC will developed to AACE Estimate Class 3 level and submitted no later than two weeks after the 60% Design Submittal.

#### Task 2.2 90-Percent Design Submittal and Review (Pre-Final)

The Engineer will develop and provide pre-final 90% design phase work comprising the 90% Design Submittal. The 90% Design Submittal will consist of the following:

• 90% complete progress P&ID drawings as listed above with modifications to include the scoped SCADA upgrades.

Project Manual that includes the City's provided standard contract documents,
Division 01 and 02 specifications included based on the project scope and the 90%
complete Process Control and Enterprise Management Systems General Provisions
(40 61 00), Operator Interface Terminals (40 62 63), and Programmable Logic
Controllers (40 63 43) technical specifications.

The 90% Design Submittal will be provided in hard paper copy and .pdf format. Hard copies shall include one bound paper (1) full size set and two (2) half size paper sets of drawings and two (2) sets of bound paper copies of the Project Manual.

The Engineer will meet with the Owner to review 90-percent completion submittal. The Owner shall provide one compiled set of comments to the Engineer. This meeting will be attended in person by up to three (3) CDM Smith staff, including the Project Manager and the Lead Design Engineer. Others may attend virtually using Microsoft Teams. The Engineer will review comments and incorporate into the 100-percent submittal.

The Engineer will also update the OPCC to 90% design completion based on updated vendor quotes and upgrades to the remaining PLCs. The 90% OPCC will developed to AACE Estimate Class 2 level and submitted no later than two weeks after the 90% Design Submittal. (in .pdf format.

#### Task 2.3 100-Percent Design Submittal (Final, Issued for Bid)

The Engineer will develop and provide final 100% design phase work comprising the 100% Design Submittal. The 100% Design Submittal will consist of the following:

- 100% complete (Issued for Bid) construction drawings.
- 100% complete (Issued for Bid) Project Manual that includes the City's provided standard contract documents, Division 01 and 02 specifications included based on the project scope and the 100% complete Process Control and Enterprise Management Systems General Provisions (40 61 00), Operator Interface Terminals (40 62 63), and Programmable Logic Controllers (40 63 43) technical specifications.

The 100% Design Submittal will be provided in hard paper copy and .pdf format. Hard copies shall include one bound paper (1) full size set and two (2) half size paper sets of drawings and two (2) sets of bound paper copies of the Project Manual.

The Engineer will also update the OPCC to 100% design completion based on updated vendor quotes and upgrades to the remaining PLCs. The 100% OPCC will developed to AACE Class 1 level and submitted no later than one weeks after the 100% Design Submittal.

#### Task 2 Work Products:

60% Review Meeting agenda and summary (.pdf electronic format)

- Compiled Log of Owner-supplied comments on the 60% Submittal (.pdf format) (responses to comments will be addressed and included in the 90-percent submittal)
- 90% Review Meeting agenda and summary (.pdf electronic format)
- Compiled Log of Owner-supplied comments on the 90% Submittal (.pdf format) (responses to comments will be addressed and included in the 100-percent submittal)
- 60% OPCC (.pdf format)
- 90% OPCC (.pdf format)
- 100% OPCC (.pdf format)

#### Task 2 Deliverables:

- 60% Design Submittal (.pdf and paper copies per above)
- 90% Design Submittal (.pdf and paper copies per above)
- 100% Design Submittal (.pdf and paper copies per above)

#### Task 2 Completion:

- Task 2.1 shall be considered complete upon submittal of the 60% Design Submittal.
- Task 2.2 shall be considered complete upon submittal of the 90% Design Submittal.
- Task 2.3 and overall Task 2 shall be considered complete upon submittal of the 100% Design Submittal.

#### **Task 3 Permitting Support**

This project will be focused on the replacement of PLC hardware and the modification of any control panel equipment required. As part of the scope of this project, the Engineer will provide a notification letter to TCEQ identifying the anticipated plant upgrades being performed under this contract.

#### Task 3 Work Products:

• TCEQ Notification Letter (.pdf format)

#### **Task 4 Bid Phase Services**

#### 4.1. Assistance in Bid Advertisement Process

Owner will be responsible for coordinating and paying for the formal advertisement of the bid in accordance with procurement requirements. Engineer will assist with the bid

advertisement by reviewing the ad language and uploading relevant documents to Engineer's Civcast account.

#### 4.2. Pre-Bid Conference

Engineer shall attend the pre-bid conference and assist the Owner's purchasing department with facilitating the meeting. Engineer shall conduct a site tour immediately following the pre-bid conference if desired by the potential bidders. Any questions that arise during the pre-bid conference must be formally submitted by potential bidders via official channels to be addressed via addenda.

#### 4.3. Bid Clarifications/Addenda

Engineer will provide clarifications to technical questions that arise during the bid process. This includes preparing up to two (2) addenda to the construction contract documents.

#### 4.4. Assistance in Bid Tabulation Process

Owner will preside over the bid opening and receive all formal bids. Engineer will receive bids from Owner and review to determine the lowest responsible and responsive bidder. Engineer will prepare a bid tabulation and recommendation of award letter.

#### 4.5. Preparation of Conformed Documents

Engineer shall incorporate all clarifications issued via addenda into conformed documents (issued for construction). Engineer shall produce and transmit to the selected Contractor three (3) sets of project manuals for execution by Contractor and Owner. Engineer will retain one executed project manual. Engineer will provide one executed project manual, one (1) full-sized plans, three (3) half-sized plans, three (3) project manuals, and PDF versions of all documents to the Contractor. Owner will retain one executed project manual. Engineer will provide Owner with one (1) full-sized plans, three (3) half-sized plans, three (3) project manuals, and PDF versions of all conformed documents.

#### Task 4 Work Products:

- Bid advertisement
- Bid addenda (up to 2)
- Bid tabulation and recommendation of award letter

#### Task 4 Deliverables:

Conformed Documents (.pdf and paper copies as described above)

#### **Task 5 Construction Phase Services**

Engineer will provide construction phase support service, which will primarily consist of submittal and RFI review, attending construction meetings, preparing design clarification memos, construction observation, and preparing record drawings.

#### 5.1. Submittal Review

The Engineer will perform a technical and functional review of shop drawings and other submittals. Each panel submittal will be reviewed (assumed 4 vendor submittals and 3 contractor panels).

#### 5.2. RFI Review

The Engineer will review and respond to technical RFIs submitted by the contractor and subcontractors. (assumed 5 RFIs)

#### 5.3. Contract Clarifications

The Engineer will prepare Contract Clarifications, keep a log to document Contract Clarifications, and other related tasks as needed during the construction process. Contract Clarifications are typically relatively minor and clarify the Contract Documents. The Engineer will prepare the Contract Clarification drawings for changes/additional work and submit a copy to the Owner for approval. The Construction Contractor will receive the Contract Clarification drawings (if required) after Owner approval.

#### 5.4. Change Order Request Review

The Engineer will review and comment on Change Order requests and initiate Change Order requests when appropriate.

#### 5.5. Coordination Meetings

The Engineer will prepare for and attend construction coordination meetings including the pre-construction conference and up to seven (7) monthly construction progress meetings. The Engineer will provide one or two members in person with applicable supporting team member(s) via Microsoft Teams.

#### 5.6. Final Completion Walk-Through/Follow-up

The Engineer will perform field testing oversight for each vendor (one day each) and one final completion walk-through with the Owner to determine if any final items need to be completed related to the project.

#### 5.7. Record Drawings Compilation

The Engineer will provide as-built documentation to Owner following substantial completion. The Engineer will prepare record drawings based on as-built markups. The Engineer will submit one (1) bound paper set of full size (22" x 34") and two (2) sets of half size (11" x17") Record Drawings.

#### Task 5 Work Products:

- Submittal Review responses (.pdf format)
- Request for Information (RFI) responses (.pdf format)

- Clarification log (.pdf format)
- Coordination Meeting agendas and summaries (.pdf format)
- Punchlist (.pdf format)
- Record Drawings (.pdf format and paper copies per above)

#### Task 6 Project and Quality Management

The Engineer will provide overall project and quality management which includes monitoring progress of work on a weekly basis for billing and compliance with established schedule, budget and work quality requirements, and coordination with the Owner and team subconsultant to ensure timely project deliverables and budget management. The Engineer will prepare a project management plan at the beginning of the project and will submit monthly status reports summarizing the progress of the project along with an updated project schedule (estimated 19-month project duration). Quality management reviews will be completed at design milestones prior to submittal to Owner in accordance with the Engineer's Quality Management System. It is estimated that Engineer will have monthly project progress meetings with the Owner. Engineer has assumed 6 project progress meetings. Once design is complete project progress meetings will be construction meetings.

#### Task 6 Work Products:

- Monthly invoices (.pdf format)
- Progress meeting agenda and summaries (.pdf format)

#### **Task 7 Additional Services During Construction**

In addition to the services listed above, the Engineer will also provide services to update various parts of the plant that have been requested by the owner. Each new item is listed as a sub-task below.

#### 7.1. iFix Software Upgrade

The Owner will provide all iFix licenses and software required, which is understood to have been previously purchased, and the Engineer will install the SCADA software. During the construction of the project, each vendor system control panel/PLC as well as the SCADA panels not provided by vendors but by the contractor, will need to communicate back to the new HMI using new tags developed in the SCADA software by the Engineer. A new database will be developed with the new software and installed on Owner provided hardware. Old and new hardware/software will be running parallel until the conversion of all control panels has been completed. Old hardware will be turned over to the Owner.

During this upgrade of the iFix software, all graphics will be included as part of the standard upgrade. No modifications will be done in this sub-task. For graphics modifications, please see subtask 7.4 below.

It is not the intention of this project to troubleshoot and repair any misconfigured I/O points in the iFix, if there are any. Engineer will not retest the entire system I/O. Engineer will spot check I/O types for each PLC only following the upgrade.

#### 7.2. XLReporter Reporting Software

Currently, the SCADA system does not have a reporting package installed. Screens are used to identify historical data. During the design phase, the Engineer will provide a specification related to the purchase of reporting software from Sytech called XLReporter. The contractor will purchase the software and provide it to the Engineer for configuration and installation in the new upgraded SCADA system to work with the new tag database. The Engineer will require some assistance with the Owner to determine what data will be required in the report. All data is assumed to be existing data in the control system and will be entered into the report. The Engineer will provide a maximum of 2 pages for the report, and no more than 100 pieces of data on the report.

#### 7.3. WIN-911 Dialer Software

The existing WIN-911 system is not working very well and was noted to have several issues. During the design phase, the Engineer will provide a specification related to the purchase of dialer software or the upgrade of the existing package, whichever is deemed appropriate. The contractor will purchase the software and provide it to the Engineer for configuration and installation in the new upgraded SCADA system to work with the new tag database. The Engineer will require some assistance with the Owner to determine call out sequence, staffing numbers, and other pertinent information related to the installation and configuration of the software.

#### 7.4. iFix Graphics Modifications

The Owner has indicated that they would like some screen modifications to improve the look/feel of the system. During this task the Engineer will provide 80 hours of dedicated time at the facility or in the office to implement graphics modifications provided by the Owner. The Engineer will offer suggestions and use the latest graphics library from the iFix software to make improvements.

#### 7.5. Lift Station Control

Currently the Owner can monitor the lift station, but they are not able to control it. During the design phase, the Engineer will interview operations staff and document the new requirements for controllability of the lift station and the graphical changes required. During the construction phase, the Engineer will implement the documented changes into the new SCADA system. The Engineer will also provide field-witnessed testing of the lift station control functionality from SCADA to prove out the new controls. Owner to provide details of new controls desired.

#### 7.6. PLC-1 Modifications

During the design phase, the Engineer will develop a specification to upgrade the PLC-1 control panel with new PLC hardware. This will be performed under Task 2 Design Services. This upgrade will also require a new Operator Interface Terminal (OIT) and programming for both the PLC and the new OIT. During the design phase, the Engineer will provide a specification to purchase the OIT. During construction, the Contractor will provide and install a new PLC-1 along with a panel-mounted OIT. This work will be detailed out in the design documents. The Engineer will migrate and update the existing graphics specific to PLC 1 control.

#### 7.7. PLC-2 Modifications

During the design phase, the Engineer will develop a specification to upgrade the PLC-2 control panel with new PLC hardware. This will be performed under Task 2 Design Services. During construction, the Contractor will provide and install new PLC-2 hardware. This work will be detailed out in the design documents. The Engineer will migrate and update the existing PLC program specific to PLC 2 control.

#### 7.8. PLC-3 Modifications

During the design phase, the Engineer will develop a specification to upgrade the PLC-3 control panel with new PLC hardware. This will be performed under Task 2 Design Services. This upgrade will also require a new Industrial panel-mounted workstation computer (WSPC) and programming for both the PLC and the new WSPC. During the design phase, the Engineer will provide a specification to purchase the WSPC. During construction, the Contractor will provide and install a new PLC-3 panel along with a panel-mounted WSPC. This work will be detailed out in the design documents. The Engineer will migrate and update the existing graphics specific to PLC-3 control. The Engineer will configure the iFix Client software on the WSPC.

#### 7.9. Training

The Engineer will provide a total of 8 hours of formalized training for operations staff. Training will be provided for the new reporting package, the new WIN-911 package, and the modifications to PLC-1/3 as well as any iFix modifications performed by the Engineer. The Owner will coordinate their staff attendance with the Engineer.

#### 7.10. Documentation

The Engineer will provide final documentation for work specifically related to these task 7 items listed above. The documentation will include one set of backup CDs of Applications Software that was updated, and testing reports.

#### Task 7 Work Products:

• Documentation as defined in Task 7.10 (.pdf format).

#### Task 7 Specific Assumptions:

1. No new graphic standards will be developed.

- 2. The existing iFix installation will be copied to new equipment and updated to iFix version furnished by League City. Old and new systems will operate side by side.
- 3. Temporary iFix licenses will be available during transition from existing iFix system to new iFix system and provided by the Owner. Engineer will assist coordinating with the vendor regarding requirements.
- 4. Historian will be migrated before PLCs are updated. Some Historian data may be lost after the transition due to PLC communication outages required for switchover.
- 5. Updated graphics for Dallas Salmon PLCs will be tested only after migration of SCADA is completed.
- 6. For the Lift Station and PLC-1:
  - a. Functionality from SCADA will be equivalent to the functionality from the current OIT (Maple Unit) for the lift station controls only.
  - b. The Contegra package system works independently from the PLC. No changes to the Contegra package system will be made as part of the improvements.
  - c. The current PLC-1 logic will be duplicated in the in the updated program.
  - d. CDM Smith will not modify programming in the Red Lion protocol converter or the DFS Remote Unit. League City will perform programming work on DFS (if necessary) and will help with the testing. Testing through DFS is to confirm that communication with the DFS server has been established after PLC-1 is changed.
- 7. XL Reporter configuration: Level of effort includes 1 Status Report of maximum 100 data points. No internal calculations on variables, read-only from iFix database, no automatic write back, no manual data entry. Training will be provided. The Owner will provide a report template for Engineer to work from.
- 8. All new iFix computers are operational and have the League City-preferred operating system installed. No other software will be provided or modified except what is identified in this scope of work.
- 9. All software licensing will be completed by League City.
- 10. WIN-911 configuration: Assumed level of effort includes no more than 40 alarms and 10 phone numbers.

#### **Task 8 Miscellaneous Services**

Due to the nature of work and the magnitude of this project, it is recommended that a budget for miscellaneous services be allocated by the City. This item will not be utilized unless approved by the City of League City staff. This item will cover additional and unforeseen needed design services for tasks that may occur during the design or the construction phase. Miscellaneous services could include but are not limited to additional addenda at approximately \$1,000 per addenda, additional RFI reviews at approximately \$600 per RFI, additional submittal reviews at approximately \$750 per submittal review,

additional construction meetings and site visits at approximately \$750 per meeting/site visit.

#### **General Scope Assumptions**

- 1. No communication to the League City SWWRF will be provided from the Dallas Salmon WWTP as part of this project. No fiber or wireless communication between the plants are included as part of this project.
- 2. The existing SLC 5/05 programs will be upgraded to the latest Allen Bradly PLC platform (CompactLogix). No operational and control changes are included in this scope of work.
- 3. CDM Smith will coordinate with existing vendor panels regarding upgrade of the PLCs from SLC 5/05 to CompactLogix. Each vendor will be responsible for their own drawings. CDM Smith will identify vendor panels as part of the system architecture drawings.
- 4. For PLC-1, PLC-2 and PLC-3 (non-vendor) only the PLCs in the panels will be replaced. The respective back-panel for each of these 3 PLC CPUs will be replaced.
- 5. Tracing and replacing field wiring will not be part of the project.
- 6. Replacing any field instruments will not be part of the project.
- 7. No changes in the fiber optic ring network within the plant will be made as part of the project. It is assumed that the fiber cable is in good working condition and the network is in good working order.
- 8. Upgrade to SCADA HMI and Historian servers and iFIX workstations is not included in the scope of this project. New required database modifications will be included and performed by Gray Matter. The Engineer will assist the Owner to develop the Gray Matter Scope.
- 9. This scope is written with the assumption that the project will be performed as a traditional design-bid-build project.
- 10. The Engineer will perform the PLC programming to the new SCADA PLCs (nonvendor PLCs) which will be supplied by the Contractor. The Engineer will convert the existing program into the new program, test the new programming, and commission the new PLC with existing equipment.
- 11. Engineer will identify to the extent possible non-functioning equipment that is associated with the SCADA PLCs during the initial site walk and report as applicable to the owner. Vendors will be responsible for repair or upgrade of equipment that is part of their systems.
- 12. All communication backbone and infrastructure is in place and communication infrastructure improvements are not included as part of this project.
- 13. The scope of services for this project excludes the following items defined in the PSA Exhibit B:
  - a. Paragraph 1.A 30% Submittals. This project scope does not include a 30% submittal. Paragraph 1.A in its entirety is not applicable to this scope of work.

- b. Paragraph I.B 60% Submittal. This project scope does not include item 1.d. typical cross sections, item 1.e., survey control, item 1.f. demo plan, item 1.g. grading plan, item 1.h. tree protection plan/landscape plan, item 1.i. traffic control plan, item 1.j. proposed drainage area map and calculations, item 1.k. plan and profile drawings, item1.l intersection details, item 1.m. sidewalks, traffic signage, and pavement marking plans, item 1.n. SW3P plan sheets and details, item 1.p. 2) structural plans/details, item 1.p. 3) signal plans/details, item 2. Final ROW documents for land acquisition, item 3. Geotechnical report, item 4. List of updated utility conflicts and contact information for appropriate utilities, and item 10. Preparation of exhibits and attendance at public meeting.
- c. Paragraph I.C 90% Submittal. This project scope does not include item 4. SW3P manual with appropriate documentations/signatures as applicable and item 7. Final list of utility conflicts and contact information for appropriate utilities.
- d. Paragraph II Bid Services. This project scope does not include item C. completed SW3P manual and F. preparation of exhibits and attendance at public meeting. The scope for item J. includes issuing two addendums during the bidding process.
- e. Paragraph III Construction Phase Services. This project scope does not include item A. preparation of exhibits and attendance at public meeting. The scope for item B. includes attendance at 7 construction meetings based on the expected construction schedule. The scope for item C. includes site visits in conjunction with construction meetings. The scope for item D. includes review of 7 submittals as defined in Section 5.1 of this scope of work document and 5 RFIs as defined in Section 5.2 of this scope of work document.

#### **Schedule**

The Engineer will commence immediately upon receipt of the Notice to Proceed. An estimated project schedule, which includes assumed review time by others, has been included as **Exhibit C**. It is assumed that design and construction will be substantially completed within 19 months from issuance of NTP.

#### **Payment Terms**

These services detailed herein are completed on a lump sum basis for an amount of \$365,380.00. A summary breakdown of costs is provided below.

| Task                                             | Hours | Fee        |
|--------------------------------------------------|-------|------------|
| Task 1 - Project Kickoff & Data Collection*      | 151   | \$ 27,000  |
| Task 2 – Design Services*                        | 448   | \$ 74,850  |
| Task 3 – Permitting Support                      | 16    | \$ 2,900   |
| Task 4 – Bid Phase                               | 64    | \$ 13,400  |
| Task 5 – Construction Phase                      | 304   | \$54,650   |
| Task 6 – Project/Quality Management              | 170   | \$ 33,800  |
| Task 7 – Additional Services During Construction | 788   | \$ 148,780 |
| Task 8 – Miscellaneous Services                  | 48    | \$10,000   |
| Total                                            | 1989  | \$ 365,380 |

\*Only Task 1 and Task 2 have been identified as time-critical tasks as defined in Paragraph 5 - Liquidated Damages of the agreement. Task 1 has a contract schedule of 43 calendar days and Task 2 has a contract schedule of 196 calendar days. Task 1 contract start date is contingent upon the City issuing the Engineer a notice to proceed. Exhibit C defines 10 calendar days of City review time for the 60% and 90% deliverables. Engineer shall not be held accountable for delays in City reviews per the contract schedule. For each day of the delay in City review of deliverables an additional day will be added to the contract schedule. Any information to be provided by the City and needed towards the effort of completing Task 1 and 2 as defined in the Agreement and is not provided per the contract schedule in Exhibit C, will result in the Engineer not being accountable for delays caused by the lack of information. For each day of the delay in receiving information, an additional day will be added to the contract.

## Exhibit B

#### **PSA Exhibit B**

#### **PHASE REQUIREMENTS**

#### I. Design Phase Services must conform to the following submittal types and requirements:

- A. 30% Submittals should, at a minimum, include the following:
  - 1. Plans that contain the following information:
    - a. Cover Sheet
    - b. Field Survey Plan Sheet
    - c. Design Plan Sheets that show Existing Conditions and proposed concepts with the existing and proposed work clearly identified
    - d. Demo Plan
    - e. Typical Cross-Sections
  - 2. List of preliminary Utility Conflicts and contact information for appropriate utilities.
  - 3. Updated Design Schedule
  - 4. Preliminary Opinion of Probable Costs (OPCC)
  - 5. Permitting recommendations/requirements
  - 6. Traffic Impact Analysis (if needed)
  - 7. Draft H&H Study and/or Preliminary Engineering Report (if needed)
  - 8. Preliminary Land Acquisition Information (if needed)
  - 9. Preliminary Geotechnical findings (if needed)
  - 10. Preparation of Exhibits and attendance at Public Meeting (if needed)

#### B. 60% Submittals should, at a minimum, include the following:

- 1. Plans that contain the following information:
  - a. Cover Sheet w/ index
  - b. General Notes
  - c. Sheet Layout
  - d. Typical Cross-Sections
  - e. Survey Control
  - f. Demo Plan
  - g. Grading Plan (if needed)
  - h. Tree Protection and/or Landscape Plan (if needed)
  - i. Traffic Control Plan (if needed)
  - j. Proposed Drainage Area Map and calculations
  - k. Plan and Profile drawings with Station Numbers for Water, Sewer, Storm, Street
  - I. Intersection Details
  - m. Sidewalks, Traffic Signage, & Pavement Marking Plans
  - n. SW3P Plan Sheet(s) and Details
  - o. Standard CoLC Details applicable for project
  - p. Project Specific Requirements/Details/Notes such as
    - 1) Electrical Plans/Details
    - 2) Structural Plans/Details
    - 3) Signal Plans/Details
- 2. Final ROW Documents for Land Acquisition (if needed)
- 3. Completed Geotechnical Report (if needed)
- 4. List of Updated Utility Conflicts and contact information for appropriate utilities.
- 5. List of needed Permits, draft applications for needed Permits

- 6. List of Technical Specifications that are needed for Project
- 7. Updated Design Schedule
- 8. Preliminary Construction Schedule
- Updated Preliminary OPCC
- 10. Preparation of Exhibits and attendance at Public Meeting (if needed)

#### C. 90% Submittals should, at a minimum, include the following:

- 1. Updated Design Plans noted above
- 2. Submittal Letter addressing previous comments made on 60% Review
- 3. Project Manual Spec Book, Bid forms, etc.
- 4. SW3P Manual with appropriate documentations/signatures as applicable
- 5. Updated OPCC
- 6. Approved Permits
- 7. Final List of Utility Conflicts and contact information for appropriate utilities.

#### D. Resubmittals

- 1. Phase submittals that do not comply with the requirements set forth above may be rejected in the sole absolute discretion of City. Rejected submittals must be resubmitted for review after all comments have been addressed.
- 2. Professional will have \$400 deducted from its Compensation for each review by City of a phase submittal after two prior reviews for that same phase.

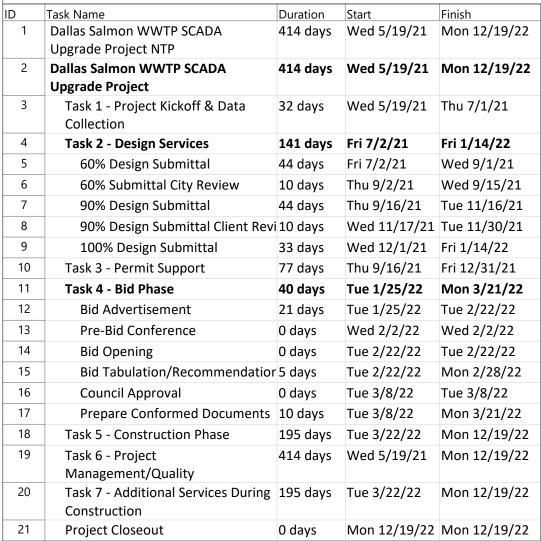
#### II. Bid Phase Services should, at a minimum, include the following:

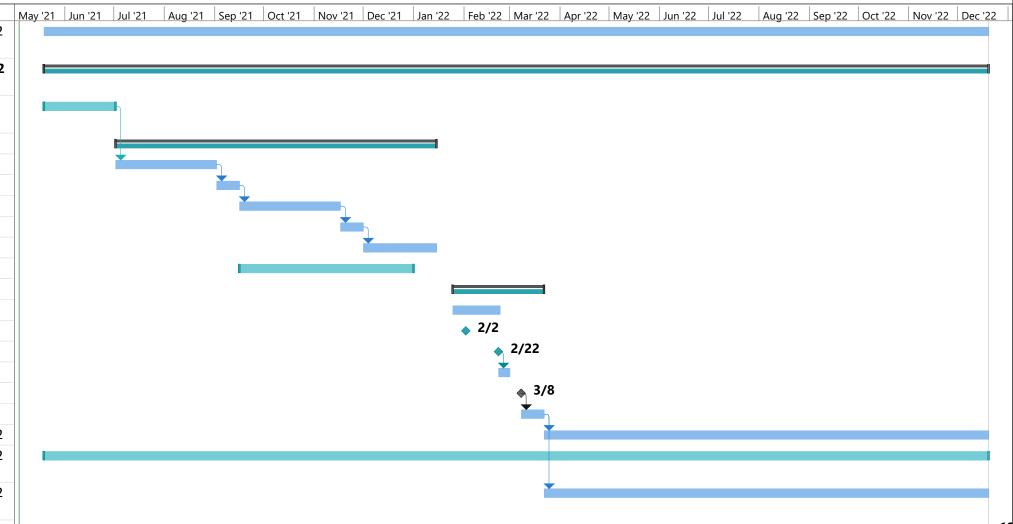
- A. 100% Construction Plans submitted for final City signatures (a Digital Copy w/ signed cover sheet to be submitted prior to posting for bids).
- B. Completed Project Manual
- C. Completed SW3P Manual
- D. Final OPCC
- E. Updated Construction Schedule
- F. Preparation of Exhibits and attendance at Public Meeting (if needed)
- G. Assist with the advertisement of the project (if needed)
- H. Address any RFI during Bid process (if needed)
- I. Attend and Assist in running a Pre-Bid Meeting (if needed)
- J. Provide Addendums to Bid Documents (if needed)
- K. Once Bids are opened, prepare Bid Evaluation, check references, and provide recommendation of award to City

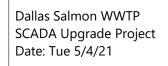
#### III. Construction Phase Services should, at a minimum, include the following:

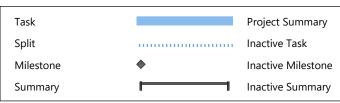
- A. Preparation of Exhibits and attendance at Public Meeting (if needed) prior to Project Start
- B. Attendance at Construction Progress Meetings (if needed)
- C. Periodic Site Visits (minimum 1 visit per month of construction)
- D. Review, Track, and make recommendations related to RFIS, Material Submittals, Change Orders, etc.
- E. Address found Design Conflicts in the Field
- F. Provide paper & digital copies of As-Builts

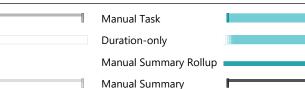
# Exhibit C Dallas Salmon WWTP SCADA Upgrade Project Project Schedule

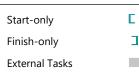












External Milestone

 $\Diamond$ 

С Э Deadline Progress

Manual Progress