PROJECT AGREEMENT

Between

THE CITY OF SUNRISE

And

CAROLLO ENGINEERS, INC.

For

Project Agreement Number: PA-22-010-CE

SPRINGTREE WATER TREATMENT PLANT FILTER REHABILITATION DESIGN, PERMITTING, AND BIDDING SERVICES

Pursuant to the provisions contained in the Continuing Services Agreement between the City of Sunrise ("City") and Carollo Engineers, Inc. ("Consultant") for Professional Services – Water, Wastewater, Wastewater Reuse and Natural Gas Utilities Projects (hereinafter referred to as "Continuing Services Agreement") dated May 7, 2021, this Project Agreement (hereinafter referred to as "Agreement") authorizes the Consultant to provide the services as set forth below:

SECTION 1 INCORPORATION OF CONTINUING SERVICES AGREEMENT

1.1 All terms and conditions of the Continuing Services Agreement between the City and the Consultant dated May 7, 2021, not specifically modified by this Agreement shall remain in full force and effect and are incorporated into and made a part of this Agreement by this reference as though set forth in full.

SECTION 2 CONSULTANT'S BASIC DUTIES TO CITY

- 2.1 By executing this Agreement, the Consultant represents to the City that the Consultant is professionally qualified to act as the Consultant for the Project (hereinafter referred to as "the Project") and is licensed to practice engineering by all public entities having jurisdiction over the Consultant and the Project. The Consultant further represents to the City that the Consultant will maintain all necessary licenses, or other authorizations necessary to act as Consultant for the Project until Consultant's duties hereunder have been completed. The Consultant shall be responsible for providing all necessary subconsultants required for the successful completion of the work as outlined in EXHIBIT "1," Scope of Services. The Consultant assumes full responsibility to the City for the improper acts, negligence, and omissions of its subconsultants and of all others employed or retained by the Consultant in connection with the Project.
- 2.2 Execution of this Agreement by the Consultant constitutes a representation that the Consultant has become familiar with the Project site and the local conditions under which the Project is to be implemented.
- 2.3 THIRTY PERCENT DESIGN DOCUMENTS

- 2.3.1 The Consultant shall review and examine the information, including any desired schedule and budgetary requirements, furnished by the City to understand the requirements of the Project and shall review its understanding of such requirements with the City.
- 2.3.2 The Consultant shall furnish to the City a preliminary written evaluation of such information in light of any Project budget requirements.
- 2.3.3 The Consultant shall review and discuss with the City any alternative approaches to design and construction of the Project.
- 2.3.4 The Consultant shall prepare and submit to the City for its review 30% design documents consisting of drawings and other documents illustrating the scale and relationship of proposed Project components. The Consultant shall be responsible for furnishing a legal description and any necessary survey(s) of the site, including, as may be reasonably required, grades and lines of streets, alleys, pavements and adjoining structures, rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, boundaries and contours of the site; locations, dimensions and necessary data pertaining to existing buildings and other improvements; and information concerning available service and utility lines above and below grade, including inverts and depths.
- 2.3.5 The Consultant shall submit to the City an estimate of probable construction costs for the Project.
- 2.3.6 NOT USED
- 2.4 SIXTY PERCENT DESIGN DOCUMENTS
- 2.4.1 Based on the 30% design documents and any adjustments to that design, the proposed schedule, or Project budget authorized by the City, the Consultant shall prepare and submit to the City for its review, 60% design documents consisting of drawings and other documents to fix and describe the size and character of the Project as to civil, architectural, structural, mechanical and electrical systems; materials and such other elements as may be appropriate.
- 2.4.2 The Consultant shall review its estimate of probable construction costs, shall make any appropriate revisions thereto and furnish same to the City.

2.5 NINETY PERCENT DESIGN DOCUMENTS

- 2.5.1 Based on the 60% design documents and any adjustments to that design, the proposed schedule, or Project budget authorized by the City, the Consultant shall prepare and submit to the City for its review, 90% design documents consisting of drawings and other documents to fix and describe the size and character of the Project as to civil, architectural, structural, mechanical and electrical systems;; materials and such other elements as may be appropriate.
- 2.5.2 The Consultant shall review its estimate of probable construction costs, shall make any appropriate revisions thereto and furnish same to the City.
- 2.5.3 The Consultant shall assist the City in preparing and filing all documents necessary to obtain the approval of all authorities having jurisdiction over the Project.

2.6 ONE HUNDRED PERCENT DOCUMENTS

- 2.6.1 Upon the City's authorization, the Consultant shall prepare 100% design documents consisting of drawings and specifications setting forth in detail the requirements for construction of the Project. Such Construction Documents shall be project specific and shall be accurate, coordinated and adequate for construction, and shall be in conformity and comply with all applicable law, codes, standards, and regulations. Products specified for use shall be readily available unless specifically authorized by the City.
- 2.6.2 The Consultant shall review its most recent estimate of probable construction costs, shall make any appropriate revisions thereto and furnish same to the City.
- 2.6.3 The Consultant shall be responsible for the preparation of bid packages to be made available for distribution to all prospective bidders via the City's electronic procurement system. Such packages shall include electronic copies of all relevant plans, specifications, and other documents upon which the bidding is to be based. All electronic documents shall be provided in an Americans with Disabilities Act (ADA) compliant format (except for plans, only the descriptive list will be provided in this format). The City reserves the right to elect paper copies if deemed necessary and, if elected, the Consultant shall make copies of complete bid packages available at its office nearest to the Project site during normal business hours for all prospective bidders. The Consultant shall be reimbursed by the City for the actual cost of reproduction of the documents contained within the bid package as a reimbursable item pursuant to the terms of Section 6.2 of this Agreement.
- 2.6.4 In the event that there are amendments to the bid packages, amendments to any of the documents contained with the bid packages, or any clarifications issued during the bidding process, the Consultant shall prepare for the City's approval written addenda as appropriate to interpret, clarify or expand the bidding documents. The Consultant shall make such documents available to all prospective bidders in a manner acceptable to the City, and shall be reimbursed for the actual costs of reproduction at the same rate specified in Section 2.6.3. There shall be no additional charges for amendments or clarifications other than as provided in Section 2.6.3.
- 2.6.5 The Consultant shall coordinate with the City during the bidding process and be available to address bidders' questions and comments at any time during the bidding process. The Consultant shall attend the pre-bid meeting, which will be held at a location as specified by the City.
- 2.6.6 The Consultant shall be available as necessary to assist the City in the evaluation of all bids received for determination of compliance with the bidding requirements. The Consultant shall not be responsible for performing any investigations or reference checks regarding bidders, nor shall it be responsible for determining whether a bid is responsive or a bidder is responsible; however, the Consultant shall assist the City as necessary in making such determination.
- 2.6.7 The Consultant will investigate, study, and analyze any proposed substitutions of materials or equipment and shall advise the City with respect to same.
- 2.6 ADMINISTRATION OF CONSTRUCTION NOT USED

2.7 ADDITIONAL SERVICES

The following services of the Consultant are not included in Sections 2.3 through 2.6, nor in EXHIBIT "1," Scope of Services. Nevertheless, the Consultant shall provide such services as related to the Project if authorized in writing by the City prior to the performance or furnishing of same, and, unless otherwise specified in this Agreement, said services shall be paid for by the City as provided hereinafter.

- 2.7.1 Providing services to perform an extraordinary examination or investigation of existing conditions or to make measured drawings, or to verify the accuracy or other information provided by the City.
- 2.7.2 Making revisions in drawings, specifications or other documents when such revisions are inconsistent with written direction by the City previously given, are required by the enactment or revision of codes, laws or regulations subsequent to the preparation of such documents and not reasonably anticipated, or are due to other causes not within the control or responsibility of the Consultant, either in whole or in part.
- 2.7.3 NOT USED
- 2.7.4 NOT USED
- 2.7.5 NOT USED
- 2.8 SERVICE SCHEDULE
- 2.8.1 The Consultant shall perform its services in accordance with agreed upon schedule. The Consultant shall submit for the City's approval a schedule for the performance for the Consultant's services that shall include allowance for time required for the City's review of submissions and for approvals of authorities have jurisdiction over the Project. The City shall review and approve or reject any schedules submitted by the Consultant within five (5) working days of said submittal. If, in the event that construction of the Project is suspended for more than thirty (30) days, the Consultant shall also suspend Construction Administration Services upon request of City. Any time spent on the Project at the request of the City or on the City's behalf during this suspension shall be additional services and shall be paid based on the Standard Hourly Rates attached to the Continuing Services Agreement as EXHIBIT "B" Hourly Rates. The reasonable term of construction upon which the fees for Construction Administration Services in this Agreement are based, shall be extended to include the period of construction suspension. This schedule, when approved by the City, shall not, except for cause, be exceeded by the Consultant. In the event the City rejects any schedules submitted by the Consultant, the Consultant shall submit a revised schedule within forty-eight (48) hours of said rejection. Submission of a schedule acceptable to the City and to which the City makes no objection shall be a condition precedent for any payment to the Consultant.
- 2.8.2 Upon receipt of the Notification of Commencement and the fully executed Purchase Order, the Consultant shall commence services to the City on the Commencement Date, and shall continuously perform services to the City, without interruption, in accordance with the time frames set forth in the "Project Schedule," a copy of which is attached and incorporated into this Agreement as EXHIBIT "2." The number of calendar days from the

Commencement Date, through the date set forth in the Project Schedule for completion of the Project or the date of actual completion of the Project, which ever shall last occur, shall constitute the Contract Time.

2.8.3 Liquidated Damages: The parties recognize and agree that certain events may cause the City to suffer losses that are by their nature uncertain, difficult to prove, and not ascertainable at the time this Agreement is entered into. The parties agree that certain breaches will cause Consultant to pay City liquidated damages resulting from the breach. In no event shall these liquidated damages be construed or deemed to constitute penalties. Unless otherwise excused by the City in writing, in the event that the Consultant fails to meet the Contract Time for completion of a particular milestone of service(s) as determined by the Project Schedule, the Consultant shall pay to the City the sum of dollars identified below per day for each and every calendar day of unexcused delay beyond the milestone completion date(s) identified below, until completion of the milestone:

Milestone 1: Task 4 – 90% Design Documents Internal Review Submittal....... \$100/day

2.8.4 No Damages for Delay: The Consultant shall not be entitled to any claim for damages including, but not limited to, loss of profits, loss of use, home office overhead expenses, equipment rental and similar costs on account of delays in the progress of the Project from any cause or national disaster or emergency, unusual delay in deliveries, unusual delay in procuring permits, differing site conditions, unavoidable casualties or other cause beyond the Consultant's control, or by delay authorized by the City, or by other causes which the Consultant determines may justify delay. The Consultant's sole recovery and remedy for any such delay shall be a reasonable extension of time and a revision to the Project Schedule as determined by the City. However, additional costs to the Consultant or delays in the Consultant's performance caused by improperly timed activities shall not be the basis for granting a time extension. If the Consultant wishes to make a claim for an increase in time of performance, written notice of such claim shall be made to the City within three (3) working days after the occurrence of the event, or the first appearance of the condition giving rise to such claim. The City's representative shall determine whether the Consultant is entitled to a time extension for the delay. The failure of the Consultant to give such notice shall constitute a waiver of any claim under this section.

2.8.5 NOT USED

2.9 PERSONNEL

2.9.1 The Consultant shall assign only qualified personnel to perform any service concerning the Project. At the time of execution of this Agreement, the parties anticipate that the following named individuals will perform those supervisory or primary functions indicated:

NAME	FUNCTION		
Lyle Munce, P.E.	Company Officer		
Vincent Hart	Technical Expert		
Christopher Reinbold, P.E.	Senior Principal Professional		
Mark Roads, P.E.	Professional		
Zoe Miller	Assistant Professional		
Francisco Pieretti, P.E.	Senior Principal Professional		
Mark Pellish, P.E.	Principal Professional		

Jeffrey West		
Joseph Hanlon		
David Seivert		
Mireya Rey		
Shosana Woody		

Senior Professional Senior Principal Professional Senior Designer Designer Clerical

So long as the individuals named above remain actively employed or retained by the Consultant, they shall perform the functions indicated next to their names. Furthermore, the City reserves the right to reject any proposed substitution for any of the above named individuals, and the City shall have the further right to require that any individual assigned to the Project by the Consultant be removed from the Project and reassigned for good cause.

SECTION 3 CITY'S BASIC DUTIES TO CONSULTANT

- 3.1 The City shall provide the Consultant with adequate information regarding the City's requirements for the Project including any desired or required design or construction schedule, or both, and any budgetary requirements including fixed limit of construction cost, prior to the start of the Construction Documents portion of design, upon which the Consultant shall be entitled to rely.
- 3.2 The City shall review any documents submitted by the Consultant requiring the City's decision, and shall render any required decision pertaining thereto in a timely fashion.
- 3.3 The City shall furnish structural, mechanical, chemical and other laboratory tests, inspections and reports as required by law or the Construction Contract.
- 3.4 If the City becomes aware of any fault or defect in the Project, nonconformance with the Construction Contract, or of any errors, omissions or inconsistencies in the drawings or specifications, prompt notice thereof shall be given by the City to the Consultant.
- 3.5 The City shall perform those duties set forth in Sections 3.1 through 3.4 as expeditiously as may reasonably be necessary for the orderly progress of the Consultant's services and of the work.
- 3.6 The City's review of any documents prepared by the Consultant or its subconsultants shall be solely for the purpose of determining whether such documents are generally consistent with the City's construction program and intent. No review of such documents shall relieve the Consultant of its responsibility for the accuracy, adequacy, fitness, suitability and coordination of its work product.

SECTION 4 CONSTRUCTION COSTS

4.1 If the cost of construction exceeds the cost agreed upon by the City by more than 5% of the lowest bona fide bid or negotiated proposal, the City may (1) give written approval of an increase in such fixed limit, (2) authorize rebidding or renegotiating of the Project, (3) terminate the Project and this Agreement in accordance herewith, or (4) cooperate in revising the Project scope or quality, or both, as required to reduce the construction cost. In the case of (4), the Consultant, without additional charge to the City, shall consult with the City and shall revise and modify the drawings and

specifications as necessary to achieve compliance with the cost agreed upon by the City. Absent negligence on the part of the Consultant in making its estimates of probable construction cost, providing such modifications and revisions shall be the limit of the Consultant's responsibility arising from the establishment of such construction costs, and having done so, the Consultant shall be entitled to compensation for all other services performed, in accordance with this Agreement.

SECTION 5 BASIS OF COMPENSATION

- 5.1 The City shall compensate the Consultant for an amount not to exceed <u>\$301,074.00</u> based on services rendered pursuant to Sections 2.3 through 2.6 and **EXHIBIT "1,"** Scope of Services, of this Agreement by allocating the estimated percentage of work for each of the tasks set forth in Section 5.2. Billings for each task shall not exceed the amount allocated to each task. The total amount in this Section includes Reimbursable Expenses which are only payable if authorized and approved.
- 5.2 Payment to the Consultant of the sum set forth in Section 5.1 shall be allocated based on the estimated percentage of work completed for each of the following tasks:

Task	Amount (\$)	Percentage (%)
Task 1 – Technical Memorandum	\$27,267	9.2
Task 2 - 30% Design Documents	\$86,581	29.0
Task 3 - 60% Design Documents	\$79,347	26.7
Task 4 - 90% Design Documents (milestone)	\$47,608	16.0
Task 5 - 100% Design Documents	\$31,739	10.7
Task 6 - Permitting Services	\$15,163	5.1
Task 7 - Bidding Services	\$9,869	3.3
Sub Total	\$297,574.00	100
Total with Reimbursables	\$301,074.00	

5.3 Additional services of the Consultant as described in Section 2.7, if any, shall be compensated as follows:

See EXHIBIT "B" Hourly Rates of the Continuing Services Agreement-

- 5.4 Reimbursable Expenses as defined in Section 6 shall be reimbursed to the Consultant by the City as provided in Section 6.
- 5.5 If the scope of the Consultant's services are changed materially through no fault of the Consultant, compensation due to the Consultant shall be equitably adjusted, either upward or downward.

SECTION 6 BILLING AND PAYMENTS TO CONSULTANT

- 6.1 Billing by the Consultant shall be in accordance with EXHIBIT "E" of the Continuing Services Agreement. Payments to the Consultant shall also be in accordance with EXHIBIT "E" of the Continuing Services Agreement and EXHIBIT "2" of this Agreement.
- 6.2 REIMBURSABLE EXPENSES

6.2.1 Reimbursable Expenses shall mean expenses incurred by the Consultant and Sub-Consultant's in the interest of the Project, as follows:

Not to exceed **\$3,500** without prior written authorization by the City.

6.2.1.1 Reasonable expenses of: long-distance communications; mileage reimbursement in accordance with Section 2-2 of the Code of Ordinances of the City of Sunrise, Florida; fees paid for securing approval of authorities having jurisdiction over the Project; actual cost of reproduction, postage and handling of drawings, specifications and other documents; renderings, models and mock-ups requested by the City; additional insurance coverage or limits, including professional liability insurance, requested by the City in excess of that required in the Request For Qualifications. The Consultant shall only be reimbursed for the direct cost of the item without additional mark-up. Costs for meals, snacks, and beverages are not considered a reimbursable expense.

SECTION 7 TERM

7.1 This Agreement shall commence on the date this instrument is fully executed by all parties and shall continue in full force and effect for **700 days**, unless otherwise terminated pursuant to Section 8.1 or 8.2, or other applicable sections of this Agreement. The City's City Manager, in his sole discretion, may extend the term of this Project Agreement through written notification to the Consultant. Such extension shall not exceed one-hundred eighty (180) days. No further extensions of this Agreement shall be effective unless authorized by City code or City Commission action.

SECTION 8 TERMINATION

8.1 TERMINATION FOR CAUSE

8.1.1 This Agreement may be terminated by either party upon seven (7) days' written notice to the other should such other party fail substantially to perform in accordance with its material terms through no fault of the party initiating the termination. In the event of a termination for cause, the Consultant shall be entitled to receive compensation for any work completed pursuant to the Agreement to the satisfaction of the City through the date of termination, less any amounts which the City reasonably deems necessary to withhold in order to correct any defects or deficiencies in the work performed by the Consultant. In no event shall the City pay for profit or overhead on work not performed.

8.2 TERMINATION FOR CONVENIENCE

8.2.1 This Agreement may be terminated by the City without cause upon ten (10) days' written notice to the Consultant. In the event of such a termination without cause, the Consultant shall be compensated for all services completed pursuant to this Agreement to the satisfaction of the City up to and through the date of termination, together with Reimbursable Expenses incurred. In such event, the Consultant shall promptly submit to the City its invoice for final payment and reimbursement which invoice shall comply with the provisions of Section 2.5 of EXHIBIT "E" of the Continuing Services Agreement.

8.2.2 Under no circumstances shall the City make payment of profit or overhead for work that has not been performed. Additionally, the City shall not make payment for the following items:

- 8.2.2.1 Anticipated profits or fees to be earned on completed portions of the work;
- 8.2.2.2 Consequential damages;
- 8.2.2.3 Costs incurred in respect to materials, equipment or services purchased or work done in excess of reasonable quantitative requirements of this Agreement;
- 8.2.2.4 Expenses of Consultant due to the failure of Consultant or its subconsultants to discontinue the work with reasonable promptness after notice of termination has been given to the Consultant; and
- 8.2.2.5Losses upon other contracts or from sales or exchanges of capital assets or Internal Revenue Code Section 1231 assets.
- 8.2.2.6 Damage or loss caused by delay.
- 8.3 <u>Assignment Upon Termination</u>. Upon termination of this Agreement, the work product of the Consultant shall become the property of the City and the Consultant shall within ten (10) working days of receipt of written direction from the City, transfer to either the City or its authorized designee, all work product in its possession, including but not limited to, designs, specifications, drawings, studies, reports and all other documents and data in the possession of the Consultant pertaining to this Agreement. Upon the City's request, the Consultant shall additionally assign its rights, title and interest under any subcontractor's agreements to the City. All work product provided under this Section shall be used solely for its intended purpose.

SECTION 9 SEVERABILITY

9.1 If any term or provision of this Agreement or its application thereof to any person or circumstance shall, to any extent, be held invalid or unenforceable, the remainder of this Agreement or the application of such terms or provisions to persons or circumstances other than those to which it is held invalid or unenforceable, shall not be affected, and every other term and provision of this Agreement shall be deemed valid and enforceable to the extent permitted by law.

SECTION 10 FOREIGN GIFTS AND CONTRACTS

10.1 Pursuant to Fla. Stat. §286.101(3), where the amount of the grant or contract is 100,000.00 or more, Consultant shall disclose any current or prior interest of, any contract with, or any grant or gift received from a country of foreign concern with a value of \$50,000 or more that was received or in force during the previous five (5) years. Definitions, disclosure requirements and exceptions are found in Fla. Stat. §268.101. Consultant represents and warrants it has complied with Fla. Stat. §286.101, it has properly disclosed such interests, contracts, grants or gifts to City before execution of this Agreement, and it will remain in compliance with Fla. Stat. §286.101 for the duration of this Agreement.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement on the respective dates under each signature: the City, signing by and through its Mayor, attested to by its City Clerk, duly authorized to execute same and by Carollo Engineers, Inc., signing by and through its Vice President, duly authorized to execute same.

<u>CITY</u>

CITY OF SUNRISE, FLORIDA

By: _____ Mayor Michael J. Ryan

_____ day of _____, 2022.

AUTHENTICATION:

City Clerk

(SEAL)

Approved as to form for the City:

Ву: _____

Kimberly A. Kisslan City Attorney

CONSULTANT

CAROLLO ENGINEERS, INC.

BY:

Lyle Munce, P.E. / Chris T. Reinbold, P.E.

TITLE: Sr. Vice President / Vice President

_____ day of ______, 2022.

AUTHENTICATE:

Secretary

Michael W. Barnes Please type name

(CORPORATE SEAL)

WITNESSES:

Authorized City Representative's Initials:_____

SCOPE OF SERVICES

BACKGROUND

The Springtree WTP is located at 4350 Springtree Drive in the City of Sunrise. The CITY desires to rehabilitate the existing filtration system as well as make changes to the potable water disinfection strategy with a focus on minimizing disinfection byproduct formation (DBPs). The exiting filters at Springtree WTP are approximately 25 years old and have been in continuous service since constructed.

Contingent upon the specific type of equipment, the Water and Wastewater Utility Rules from the Florida Administrative Code (FAC 25-30.115 and 25-30.140) identify anticipated equipment useful lives to be between 20 and 30 years. Based on the age of the existing filter media and appurtenances, filter system rehabilitation is anticipated for continued long term use. In addition to the filter system, there are other related ancillary WTP features that should be considered for refurbishment or replacement at this time to renovate aging assets and improve the facility's reliability to continue to produce potable drinking water well into the future.

The following tasks will be undertaken as part of this filter rehabilitation effort:

- Review Past and Current Project Documents The CONSULTANT will review historic plant monthly operating data (for a period not more than 2 years), and regulatory permits as it pertains to performance of the existing filtration system. The replacement media and appurtenances of the rehabilitation design will meet or exceed required system performance and related regulatory mandates.
- The following features will be replaced as part of the filter refurbishment. Performance will meet the established criteria of the system (i.e. replacement similar to existing based on current manufacturer's offerings) with specific improvements as noted below:
 - Filter underdrain.
 - Filter media (depth of media will be reviewed in parallel to disinfection strategy review, i.e. 4-log disinfection).
 - Surface wash system.
 - Launder troughs.
 - Air scour delivery in underdrain (i.e. air piping and underdrain connections for distribution).
 - Filter influent, backwash, and effluent control valves (electric actuators were recently replaced, this effort includes replacement of the mechanical valve and reconnection to the actuator)
 - Replacement of Human Machine Interface (HMI) associated with the existing filter control panel.
 - Photometric analysis of the filter structure to provide additional lighting as may be necessary to meet current lighting requirements.

- Addition of a crystalline concrete coating system and/or epoxy injection to address leaks which have not been successfully addressed through other methods.
- Turbidity instruments.
- Filter box level indicators.
- Loss of head pressure monitoring in filter.
- Replacement of the air scour blowers.
- Replacement of electrical panels in the electrical room.
- Replacement of doors to control room of air scour blower room and electrical room.
- Provide leveling grout and/or stairs and landing to address floor slope issues with ponding water in air scour room.
- In addition to the replacement of the various filter features, an evaluation of 4-log disinfection will be undertaken. This evaluation will include the following:
 - Evaluate installation of roof over filters to increase disinfectant contact time (CT).
 - Evaluate flume hydraulics and CT.
 - Review existing media depth with potential media depths, considering means to achieve CT in a manner that reduces DBP formation.
 - Develop recommendations for improving the WTP's 4-log disinfection strategy considering the above evaluation. These recommendations will be reviewed with the FDEP to receive concurrence on approach.
 - Design of the features which receive FDEP approval (i.e. covering the filters, replacing the influent channel with a piping system, or revise media depths and submit new 4-log permit application) will be incorporated into the filter upgrade construction documents.
 - Modify and/or replace chlorine, fluoride, and ammonia injection points at the influent to the transfer pump clearwell with new diffusers.

It is intended that this design effort will account for the necessary components for a complete and operational filter rehabilitation and 4-log improvements treatment system. Finished water quality leaving the plant will be projected based on operating parameters agreed upon for the modified facility in conjunction with the recent conversion of reverse osmosis to nano-filtration treatment. Finished water quality targets will be coordinated with identified stakeholders during design and testing will be facilitated by the Consultant and performed by the Contractor and start-up activities to optimize targeted water quality parameters. The Consultant will coordinate with the Corrosion Control Study Consultant and the City during the design phase.

<u> TASK 1 – Technical Memorandum (TM)</u>

Consultant shall prepare a TM to document the evaluation of 4-log disinfection and provide recommendations for improving the WTP's 4-log disinfection. Consultant will conduct preliminary meetings with FDEP.

Deliverables

- Draft TM for the Evaluation of 4-log disinfection alternatives.
- Final TM incorporating City and FDEP review comments.

TASK 2 – THIRTY PERCENT DESIGN DOCUMENTS

Task 2 shall commence upon approval of the Final TM from the City. Consultant will perform a site visit with the City staff and confirm and verify information from the existing design documents.

Deliverables

- Meeting minutes (via electronic delivery in PDF format).
- Four (4) 24" x 36" hard copies and electronic copy in PDF format of 30 percent design drawings to City of Sunrise Utilities Department for internal review.
- Draft Technical Memorandum for the Evaluation of 4-log disinfection alternatives.

TASK 3 – SIXTY PERCENT DESIGN DOCUMENTS

The 60% design is to commence only after the City of Sunrise has provided comments on the 30% design drawings.

The Consultant will attend one preliminary meeting with the City of Sunrise Community Development Department. Consultant will conduct the review meeting with the City of Sunrise CDD and prepare meeting minutes documenting decisions and action items.

Deliverables:

- Four (4) 24" x 36" hard copies and electronic copy in PDF format of 60 percent design drawings to City of Sunrise Utilities Department for internal review.
- Specifications (electronic copy in PDF format)
- Construction Cost Estimate Class 3 (electronic copy in PDF format)

TASK 4 – NINETY PERCENT DESIGN DOCUMENTS

The 90% design is to commence only after the City of Sunrise has provided comments on the 60% design documents. The Consultant will provide a 90% design submittal to City of Sunrise Utilities Department for internal review. The Consultant will attend one meeting with the City of Sunrise Utilities Department to discuss internal review comments, if necessary. After addressing the City of Sunrise Utilities Department comments, 90% design submittal plans will be submitted to both the City of Sunrise Community Development Building and Engineering Division for plan review.

Authorized City Representative's Initials:____

Deliverables:

- Four (4) 24"x36" hard copies of drawings to City of Sunrise Utilities Department for internal review with electronic copy in PDF format.
- Eight (8) 24" x 36" signed and sealed hard copies of the Drawings to the City of Sunrise Engineering Division.
- Two (2) 24" x 36" signed and sealed hard copies of the Drawings to the City of Sunrise Engineering Division.
- Construction Cost Estimate Class 2 (electronic copy in PDF format).
- Final Technical Memorandum for the Evaluation of 4-log disinfection alternatives.

TASK 5 – ONE HUNDRED PERCENT DESIGN DOCUMENTS

The Consultant will attend one meeting with the City of Sunrise Utilities Department to discuss the permitting comments received. Consultant will revise the 90% design documents to prepare the 100% design documents for construction as necessary to reflect any decisions taken at this level an incorporate the permitting comments received from CDD.

Deliverables:

- Response letters to comments provided by the City of Sunrise Building and Engineering Divisions.
- Eight (8) 24" x 36" signed and sealed hard copies of the drawings to the City of Sunrise Engineering Division.
- Two (2) 24" x 36" signed and sealed hard copies of the drawings (two hard copy sets and an electronic copy in PDF format).
- Signed & Sealed specifications (two hard copy sets and an electronic copy in PDF format).
- Construction Cost Estimate Class 2 (electronic copy in PDF format).

TASK 6 – PERMITTING SERVICES

The Consultant shall prepare the permit packages and obtain applicable signatures once the 90% submittal has been reviewed and approved by the City of Sunrise Utilities Department. The Consultant shall submit the permit packages to the respective permitting agencies (upon direction from the City of Sunrise Utilities Department) and obtain permit approvals from each agency. The City of Sunrise Utilities Department shall be responsible for paying all permit fees. It is anticipated that permits will be required from the following agencies:

- City of Sunrise CDD Engineering and Building Division
- Florida Department of Environmental Protection (FDEP)
- Broward County Environmental Protection and Growth Management

Development of the permit packages consists of the following information and activities:

• Submit design drawings (signed and sealed by Professional Engineer).

- Provide required supplemental information to support permit requests for additional information (RAI).
- Complete permit applications to be signed and sealed by the design engineer.
- Incorporate revisions requested by the permitting agencies and re-submit the information.

TASK 7 – BIDDING SERVICES

The CONSULTANT shall assist the CITY during the bidding phase by preparing the bid packages in electronic format, interpreting questions and issuing written addenda if necessary, address bidders questions through the CITY's agent, and reviewing the bids accepted.

Deliverables:

- Addenda (as determined necessary and provided in electronic PDF format)
- Letter of Recommendation of Bid Acceptability

ASSUMPTIONS

- Except as noted otherwise herein, in providing opinions of cost, financial analyses, economic feasibility projections, and schedule for potential projects, the CONSULTANT has no control over cost or price of labor and material; unknown or latent conditions that may affect operation and maintenance costs; competitive bidding procedures and market conditions; time or quality of performance of third parties, quality, type, management, or direction of operating personnel; and other economic and operational factors that may materially affect the ultimate project cost or schedule. Since the project will be constructed by a specialty contractor, the CONSULTANT's construction cost estimate will be primarily based on quotes, including limitations related thereto, obtained from the specialty contractor.
- The services to be performed by the CONSULTANT are intended solely for the benefit of the CITY. No person or entity not a signatory to this Agreement shall be entitled to rely on the CONSULTANT's performance of its services hereunder, and no right to assert a claim against the CONSULTANT by assignment of indemnity rights or otherwise shall accrue to a third party as a result of this Agreement or the performance of the CONSULTANT's services hereunder.
- Services not included:
 - Services not specifically noted herein.
 - Permit application fees;
 - Geotechnical borings, soils analysis, or survey services.

PROJECT SCHEDULE

Task	Task/Completion	Task Completion
	Duration in	Calendar Days
	Calendar Days	Following Notice to
		Proceed
Task 1 – Technical Memorandum	90	90
Task 2 - 30% Design Documents	112	202
Task 3 - 60% Design Documents	84	286
Task 4 - 90% Design Documents Internal Review	56	342
Submittal (Milestone 1)		
Task 4 – 90% Design Documents CDD Submittal	42	384
Task 6 - Permitting Services	120	504
Task 5 - 100% Design Documents	84	588
Task 7 - Bidding Services	90	678
Total		678

Notes:

The project schedule assumes:

Task 1 assumes 30 days for a review period from FDEP.

Twenty-eight days for Útilities' internal review of submittals.

Ninety days for Purchasing Office to review bid documents and bid project.

Submission of permit application and supporting documents at the 90% design level.