

PROJECT AGREEMENT

Between

THE CITY OF SUNRISE

And

Hazen and Sawyer, P.C.

For

Project Agreement No. 21-009-HS

Sawgrass WWTP – DAF Thickening Process Improvements Design and Bidding Services

Pursuant to the provisions contained in the Continuing Services Agreement between the City of Sunrise ("City") **Hazen and Sawyer, P.C.** ("Consultant") for Professional Services – Water, Wastewater, Wastewater Reuse and Natural Gas Utilities Projects (hereinafter referred to as "Continuing Services Agreement") dated May 11, 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 11, 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 – Not Included

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; landscape architectural and irrigation design; 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 ONE HUNDRED PERCENT DOCUMENTS

- 2.5.1 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.
- 2.5.2 The Consultant shall review its most recent estimate of probable construction costs, shall make any appropriate revisions thereto and furnish same to the City.
- 2.5.3 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. This can begin when the design documents are approximately 90% complete.
- 2.5.4 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.
- 2.5.5 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 2.5.4. There shall be no additional charges for amendments or clarifications other than as provided in Section 2.5.4.
- 2.5.6 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.

- 2.5.7 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.
- 2.5.8 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 Included

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 Preparing drawings, specifications and supporting data in connection with Change Orders, provided that such Change Orders are issued by the City due to causes not within the control or responsibility of the Consultant, either in whole or in part.
- 2.7.4 Providing services concerning repair or replacement of work damaged by fire or other cause during construction provided that such services are required by causes not the responsibility of the Consultant, either in whole or in part.
- 2.7.5 Providing services made necessary solely by the default of the Contractor or defects or deficiencies in the work of the Contractor.

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 1.6 - Permit Documents

\$ 150.00

- 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, , and not unreasonably withheld. 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 Notwithstanding the provisions of Subparagraph 2.8.4, in the event that the Contractor fails to substantially complete the Project on or before the Substantial Completion date specified in the Construction Contract or the Contractor is granted an extension of the time to complete performance under the Construction Contract and the Consultant's Contract Administration Services are materially extended by the City as a direct result thereof and through no fault of the Consultant, the Consultant shall be entitled to additional compensation at the rates shown in the Continuing Services Agreement EXHIBIT "B." The amount of compensation due by the Consultant under this Subparagraph shall be pursuant to approved written Amendment to this Agreement

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:

<u>NAME</u>	<u>FUNCTION</u>
Patricia Carney, PE	Company Officer
Kurt Pfeffer, PE	Technical Expert
Diane McKinley, PE	Senior Principal Professional
Brad Pickett, PE	Supervising Professional
Keith Dinnen, PE	Supervising Professional
Jean Paul Silva, PE	Supervising Professional
Patrick Bowles, PE	Supervising Professional
Eric Antmann, PE	Senior Professional
Terry Bocas	Senior Designer
Teresa McNally	Senior Administrator

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 Phase 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 **\$283,615.00** 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 phases set forth in Section 5.2. Billings for each phase shall not exceed the amount

allocated to each phase. 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 1 - Design for Bidding	\$269,876	95.2%
Task 2 - Bidding Services	\$12,739	4.5%
Reimbursable Expense, if authorized and approved	\$1,000	0.3%

- 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 Consultant's in the interest of the Project, as follows:

Not to exceed **\$1,000** 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 Ordinance 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 through **December 30, 2024**, 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
 - 8.2.2.5 Losses 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 Assignment Upon Termination. 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.

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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 **Hazen and Sawyer, P.C.**, signing by and through its **Vice President** duly authorized to execute same.

CITY

CITY OF SUNRISE, FLORIDA

By: _____
Mayor Michael J. Ryan

_____ day of _____, 20__.

AUTHENTICATION:

City Clerk

(SEAL)

Approved as to form for the City:

By: _____
Kimberly A. Kisslan
City Attorney

CONSULTANT

Hazen and Sawyer, P.C.

By: _____
Patricia A. Carney, P.E.
Vice President

____ day of _____, 20__.

AUTHENTICATE:

Vice President

Robert B. Taylor, Jr., P.E.

(CORPORATE SEAL)

WITNESSES:

EXHIBIT “1”

SCOPE OF SERVICES

Sawgrass WWTP – DAF Thickening Process Improvements Design and Bidding Services

Background

The biosolids treatment system at the Sawgrass Wastewater Treatment Plant (WWTP) utilizes a Dissolved Air Flotation Thickening (DAFT) facility to thicken waste activated sludge (WAS) produced by the secondary treatment system. The DAFT facility consists of two (2) parallel DAFT treatment units. Each DAFT treatment unit consists of a pressure retention tank, backpressure control valve, recirculation pump, flotation tank, and longitudinal sludge skimmer. The DAFT facility also requires appurtenant equipment, including two (2) polymer feed skids, three (3) WAS feed pumps, four (4) TWAS pumps, and two (2) air compressors. There is also a standby recirculation pump for redundancy. The purpose of the DAFT facility is to thicken the WAS biosolids by removing water. Thickening is required for the downstream biosolids treatment processes to adequately function. The DAFT process produces thickened WAS (TWAS), and the water removed from the WAS is returned to the secondary treatment process for further treatment. DAFT Unit No. 1 was installed in 1987, and DAFT Unit No. 2 was installed in 1996. The City has determined that mechanical and process equipment at the two DAFT units has reached the end of its useful life and requires replacement. The City has also determined that the steel canopy roof covering the two DAFT units is in a deteriorated condition and also requires replacement.

SECTION 1 DESIGN SERVICES

Unless otherwise agreed in writing, the CONSULTANT shall perform the following design services in connection with the Project:

1.1 Basis of Design. – Not Included

1.2 Preliminary Consultation and Analysis. Prior to preparation of the Design, the CONSULTANT shall first consult in detail with the CITY, and shall carefully analyze any information furnished by the CITY to understand the requirements of the Project, including but not limited to, any design, construction, scheduling, budgetary or operational requirements. The CONSULTANT shall perform and furnish to the CITY, as a Technical Memorandum entitled **Preliminary Analysis Technical Memorandum (PATM)**, a written technical evaluation of the Dissolved Air Flotation (DAF) System, its appurtenant liquid emulsion polymer feed system and air compressor system, steel canopy roof, pumping equipment and associated ancillary components, which shall be reviewed with the CITY. The PATM furnished by the CONSULTANT shall also include the following:

1.2.1 Data Collection Review. CONSULTANT will develop up to two (2) data requests and submit to the CITY electronically. The CITY will respond to each item in the data requests by either providing the requested information or indicating the requested information is unavailable. Data to be reviewed by or requested by CONSULTANT include:

- Contract Drawings from other projects
- Plant O&M Manuals
- Existing Preliminary Engineering or Basis of Design reports
- Record Drawings (in PDF and CADD)
- Existing SCADA programming documentation including written control strategies and HMI graphic screens
- Existing PLC program files in native format
- Existing PLC panel layout drawings and wiring diagrams (with field markups if applicable)
- Recent bidding and solicitation documents
- CITY Standard Specification, if available

1.2.2 Field Site Visit. Conduct one (1) site visit to gather information listed above in section 1.2.1, take photographs and document readily observable conditions that will need to be taken into consideration during design.

1.2.3 Topographic Survey. CONSULTANT will use as-built elevations provided by the CITY for the design of the project in lieu of a topographic survey.

Establishing site benchmarks or verification of pump control elevations, weirs or other control elevations are not anticipated.

- 1.2.4 An analysis of available data and services required for design or construction of the Project and assistance in the procurement of such data or services. This data and these services include, but are not limited to: property surveys, topographic surveys, geotechnical investigations and consultations, and environmental assessments and impact statements;
- 1.2.5 An analysis of relevant laws, regulations, ordinances, permits, and other requirements of any governmental entity having jurisdiction over the design or construction of the Project. The CONSULTANT shall also consult with any such entities as may be required to assure compliance with any such laws, regulations, ordinances, or other requirements;
- 1.2.6 Documentation of Existing System Design and Proposed Modifications. The CONSULTANT shall prepare and submit to the CITY a PATM for the Project. The PATM shall include project narrative describing the purpose and limits of the project, existing DAF process design criteria including chemical feed and compressor systems. As part of the PATM, CONSULTANT will identify electrical, mechanical, structural and/or instrumentation and control conflicts for this project.
 - DAF System Assumptions. The DAF system will be replaced similarly with respect to process technology, sizing, and operations as presented by the as-builts, O&M Manuals and technical data provided by the CITY. The purpose of this design is to: 1) upgrade the equipment which is deteriorated and past their useful life; and 2) correct mechanical deficiencies in the DAF systems relating to mechanical operations, reliability, and leaks that may have existed since the last upgrade. This scope does not include process modeling, pilot testing, optimization, or alternative process evaluations nor the expansion of the DAF process.
 - Project Interface – Maintenance of Plant Operations: The basis of design assumes that one of the two DAF Thickening units may be taken offline for rehabilitation for up to five months without impact to plant operations. Furthermore, the basis of design assumes that periodic planned complete shutdowns of the DAF thickening facility of up to eight (8) hours in length will occur during construction. This scope does not include the design of temporary thickening facilities or bypass of the DAF thickening facility.
 - Project Interface - Sequencing Assumptions. The basis of design assumes the design of the new components for the DAF systems above will be coordinated with final design of the SAWGRASS WTP TRAIN A SECONDARY TREATMENT PROJECT in which a new Blower Building No.1 will be constructed and the existing electrical and controls

equipment in the old Blower Building No.1 will be phased into the new building. The DAF upgrades will be designed to operate under the existing electrical control systems as well as the new electrical control system.

- Project Interface – Network and I/O As-Built Assumptions. Since the plant will be embarking on an upgrade to the electrical and control systems under the SAWGRASS WWTP TRAIN A SECONDARY TREATMENT DESIGN Project, the existing conditions for electrical and controls for the DAF design will assume the following order of precedence for existing conditions:
 - 1st Order: SAWGRASS WWTP TRAIN A SECONDARY TREATMENT PROJECT (90% Design), Brown and Caldwell, dated December 2019.
 - 2nd Order: SAWGRASS WWTP EXPANSION AND BIOSOLIDS FACILITIES PROJECT, CDM, dated February 2000.

After providing the PATM to the CITY, the CONSULTANT shall meet with representatives of the CITY to review the PATM and to receive any comments, suggestions, questions, or other communications from the CITY concerning the PATM. A Final PATM shall be submitted that addresses the comments provided by the CITY.

1.3 Preliminary Design. – Not Included

- 1.4 Design for Bidding.** Upon authorization by the CITY, and after reviewing with the CITY the Preliminary Analysis Technical Memorandum Design required by Paragraph (b) hereinabove, and after incorporating any changes or alterations authorized or directed by the CITY with respect to said Preliminary Design or with respect to the requirements of the Project, and in no event later than days after written authorization, the CONSULTANT shall prepare and submit to the CITY 60%, 90% and 100% Design Documents for Construction in accordance with the project schedule and deliverables. The Design for Construction shall include drawings, plans and specifications (the "Construction Documents") which describe with specificity all elements, details, components, materials, and other information necessary for construction of a complete and usable Project. The Construction Documents shall be accurate, coordinated and adequate for construction and shall be in conformity and comply with all applicable law, codes and regulations. Products, equipment and material specified for use shall be readily available unless written authorization to the contrary is given by the CITY. The Design for Construction shall specifically include, but shall not be limited to, the following:

- 1.4.1 General Design.** General design covers index of drawings, location and vicinity maps, design data, flow diagrams, and general conditions. General drawings and specifications shall be prepared;

1.4.2 Civil Design. – **Not Included**

1.4.3 Architectural Design. – **Not Included**

1.4.4 Structural Design. Structural design of the DAF canopy covering the DAF tanks, pump supports, pipe supports, DAF structure interior coating system, minor DAF structural repairs and handrail structures is covered by this task. Contract drawings and specifications for the structural work shall be prepared;

1.4.5 Mechanical Design. Mechanical design consists of developing specifications for mechanical replacement of the pressure retention tanks, backpressure valve assemblies, and longitudinal sludge skimmers of the two DAFT Units. Mechanical design will also include developing specifications for mechanical replacement of the three (3) WAS feed pumps, three (3) recirculation pumps, two (2) polymer feed skids, four (4) TWAS Pumps, and two (2) air compressors. The scope of mechanical design shall include hydraulic calculations to confirm pump sizing information provided by the CITY. Contract drawings and specifications for the mechanical work shall be prepared;

1.4.6 Electrical Design. Electrical design for the DAF Thickening Process Improvements shall be limited to the coordination of motors for the new pumps, conductors and conduit from each motor to its respective local disconnect, and power and controls coordination with the CITY for the SAWGRASS WWTP TRAIN A SECONDARY TREATMENT PROJECT being constructed under a separate contract. New individual motor controllers and variable frequency drives are not included as part of this contract. Lighting design will be included both for the existing DAF building and for the workspace below the canopy provided for the DAF tanks. This scope does not include plant or facility power system studies, design of existing or new MCCs, or panelboards located outside of the DAF Process Building and DAF tanks. Contract drawings and specifications for the electrical work shall be prepared.

1.4.7 Instrumentation and Control Design. Instrumentation and Control Design. Instrumentation design and replacement will follow the existing system configuration as closely as possible. New Local Control Panels (LCP's) will be provided local to the DAFT units. Field instruments and I/O will be connected to the new LCP's, local to the equipment. For communication with the plant SCADA system, I/O between the new DAFT LCP's will be connected to existing SCADA PLC panel(s). The majority of signals will be connected to the existing remote I/O cabinet (I/O 1-2), located just north of the DAF Process Building. The new DAFT LCP's shall be equipped with PLC-based local control and Human-Machine Interface (HMI). Communication between the new DAFT LCP's and plant SCADA system

will be via the existing hardwired discrete and analog signals. Existing I/O within the SCADA PLC panel (s) will be reused. This project scope does not include the design or supply of new SCADA PLC panels. Existing SCADA PLC programming associated with the DAF Thickening system shall remain. No modifications will be made to the existing SCADA communication fiber-optic network. This project scope will include specifying the requirements of a Systems Integrator to perform the instrumentation setup and loop checkout work for integration of the DAF system into the existing SCADA System. Contract drawings and specifications for the instrumentation and controls work shall be prepared.

- 1.4.8 **Disciplines Not Included.** This project only includes design services as described above and does not include design services for, but not limited to, geotechnical, HVAC, plumbing, fire protection, site electrical, paving, grading, drainage or landscaping, hydraulic profiles, master planning, or development or review of existing operating/control strategies.

- 1.5 **Estimate of the Cost of Construction.** Contemporaneously with the submission of the 60% and 90% Design for Construction documents, the CONSULTANT shall submit to the CITY in writing its updated Estimate of the Cost of Construction. The CONSULTANT shall submit the final Estimate of the Cost of Construction with the 100% completed Design for construction. Once submitted, said final estimate shall not be increased or decreased by the CONSULTANT unless the Design for Construction is changed upon authorization by the CITY. In such event said final estimate shall be reasonably adjusted to reflect any increase or decrease in cost resulting from the change in Design for Construction. Prior to authorizing the CONSULTANT to proceed with preparation of the Design for Construction, the CITY may establish and communicate to the CONSULTANT a maximum sum for the Cost of Construction of the Project (the "Maximum Cost Limit"). If the CITY has not advertised for bids within ninety (90) days after the CONSULTANT submits the Design for Construction to the CITY, the CONSULTANT shall adjust the Estimate of the Cost of Construction utilizing changes in the Engineering News Record Construction Cost Index between the date of submission of the Design for Construction to the CITY and the date on which bids are sought. In the event the final estimate of the Cost of Construction as provided in this Paragraph exceeds the Maximum Cost Limit, or in the event the lowest bona fide bid from a qualified contractor exceeds the Maximum Cost Limit, the CITY may require the CONSULTANT, without additional cost to the CITY, to consult with the CITY and to revise and modify the Design for Construction and the Contract Documents as required to achieve compliance with the Maximum Cost Limit. Absent clear and convincing negligence on the part of the CONSULTANT in making its final Estimate of the Cost of Construction or in designing the Project without regard to the Maximum Cost Limit, providing such modifications and revisions shall be the limit of the CONSULTANT's responsibility arising from the

establishment of the Maximum Cost Limit, and having done so, the CONSULTANT shall be entitled to compensation for all other services performed, in accordance with the Project Agreement;

- 1.6 Permit Documents:** The CONSULTANT shall prepare the permit packages and obtain applicable signatures once the 90% submittal has been reviewed and approved by the CITY's Utilities Department. CONSULTANT shall submit the permit packages and fees to the respective permitting agencies (once 90% drawings are approved by the Utilities Department) and obtain permit approvals from each agency. A dry run submission through the City of Sunrise Building Department is included. The CITY shall be responsible for paying all permit fees. It is anticipated that permits will be required from the following agencies:

- City of Sunrise Community Development Department - Building

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

- Submit updated drawings (signed and sealed by Professional Engineer).
- Provide required supplemental information to support permit requests.
- Complete permit applications to be signed and sealed by the design engineer.
- Prepare a tracking sheet with the indication of dates of submittals of each application and approval or comments from the corresponding agency.
- Incorporate revisions requested by the permitting agencies and re-submit the information.

- 1.7 Project Meetings.** CONSULTANT shall coordinate and attend the following meetings for this project:

- Project Kick-off Meeting (Minutes provided)
- Preliminary Analysis Technical Memorandum Meeting (Post Data Requests, no minutes provided)
- Preliminary Analysis Technical Memorandum City Workshop Meeting (Minutes provided)
- 60% Design Workshop Meeting (Minutes provided)
- 90% Design Workshop Meeting (Minutes provided)

SECTION 2 BIDDING SERVICES

Unless otherwise agreed in writing, the CONSULTANT shall perform the following bidding services in connection with the Project:

- 2.1 **Solicitation of Bids.** The CONSULTANT shall prepare bid specifications and packages as directed by the CITY Purchasing Department. CONSULTANT shall meet with CITY Purchasing Department to review bid documents. CONSULTANT shall provide a final copy of the complete bid package in digital format to the CITY for distribution to prospective bidders. CONSULTANT shall attend a pre-bid conference and project site visit.
- 2.2 **Addenda.** The CONSULTANT shall prepare for CITY approval addenda as appropriate to provide responses to technical inquiries regarding the Bidding Documents. The CONSULTANT shall provide the CITY with a digital copy of addenda for distribution to prospective bidders. The CONSULTANT shall coordinate with the CITY during the bidding process and be available to assist the CITY in addressing bidders' questions and comments at any time during the bidding process. Non-technical inquiries will be addressed by the CITY.
- 2.3 **Evaluation of Contractors and Suppliers.** The CITY shall forward the bid proposal package for the lowest responsive bidder to the CONSULTANT. The CONSULTANT shall evaluate the bid for technical compliance and advise the CITY as to the acceptability and qualifications of prospective contractors and prospective subcontractors, suppliers, and others proposed by the lowest responsive bidder. Non-technical bidding requirements shall be evaluated by the CITY. CONSULTANT shall make a recommendation to the CITY in regard to the award of the contract.
- 2.4 **Substitution of Materials and Equipment.** Included as part of Construction Administration.
- 2.5 **Bid Opening.** The CONSULTANT shall attend the bid opening, which will be held at a location as specified by the CITY. The CITY shall prepare appropriate bid tabulation sheets. The CONSULTANT shall assist the CITY in evaluating bids or proposals as described above.
- 2.6 **Construction Cost.** If the bid cost of construction exceeds the estimated 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 have done so, the CONSULTANT shall be entitled to compensation for all other services performed, in accordance with this Agreement.

KEY ASSUMPTIONS

1. City will provide staff as needed to access the site as well as open or operate any equipment associated with this project.
2. City will provide record drawings information for underground utilities and electrical systems in the areas around the DAF Thickening facility and appurtenant systems.
3. HVAC and Architectural modifications are not included. Landscaping and photometric plans are not included. A geotechnical investigation is not included, as it is not required for this work.
4. A topographic survey is not included.
5. The City will provide AutoCAD files for Sawgrass WWTP Train A Secondary Treatment Project.
6. Fees for legal assistance are not included as part of this work.
7. CONSULTANT shall provide the following Conformed Documents: six (6) sets of specifications and six (6) sets of half size drawings for contract execution; and six (6) sets of full size "D" drawings and six (6) sets of half-size drawings in accordance with permit approvals. CONSULTANT shall provide specification pages changed per addenda on colored paper. CONSULTANT shall provide notes on drawings changed per addenda; and CONSULTANT shall cloud and note all drawing changes required for each permit jurisdiction approval.
8. All permit/certification fees shall be paid by CITY.
9. CONSULTANT shall prepare invoices on a per task basis. Invoices will not be broken down into subtasks.
10. CDD Engineering permit is not required due to work being performed inside the property boundary of Sawgrass WWTP.
11. It is assumed there are no changes to the unit processes and capacity of the plant and therefore a permit through FDEP and EPGMD is not required. This will be confirmed during design. Additional compensation will be requested if these permits are required.
12. Equipment capacity calculations for the DAF Thickening process equipment, Recirculation Pumps, WAS Feed Pumps, TWAS Pumps, air compressors, longitudinal sludge skimmers, and appurtenant systems are not included as part of this Agreement. Equipment will be replaced with equipment of similar capacity.
13. Improvements or revisions to the sludge holding tank associated with the DAF system is not included as part of this work.
14. Project will be billed on a percent complete basis for the tasks shown in the payment schedule except other direct costs.

PROJECT DELIVERABLES

Task	Task Description	Deliverable
1	Design Services	
1.2	Preliminary Analysis Technical Memorandum	Technical Memorandum
1.4	Design for Bidding	Design 60%, 90% and 100% Construction documents – six (6) hard copies and an electronic copy of Drawings and Specifications for each design submittal.
1.5	Estimate of Cost of Construction	Electronic copy of 60%, 90% and 100% Cost Opinion
1.6	Permit Documents	Electronic copies of permit application, RFIs, RFI Responses, and permits as available.
1.7	Meetings	Electronic copies of Meeting Minutes
2	Bidding Services	Three (3) hard copies and an electronic copy of the bid documents, electronic copies of RFIs and Responses, Electronic copy of the Bid Recommendation

EXHIBIT “2”

PROJECT SCHEDULE

Task/Description	Task/Completion In Weeks Following Authorization	Task/Completion Duration In Weeks
Task 1 – Design Services		
1.1 Basis of Design – Not Included	-	-
1.2 Preliminary Analysis TM	12	12
<i>PATM City Review</i>	16	4
1.3 Preliminary Design – Not Included	-	-
1.4/1.5 Design for Bidding and Estimate of Cost of Construction		
DAF Thickening Process Improvements 60% Design	28	12
<i>60% City Review</i>	32	4
DAF Thickening Process Improvements 90% Design	44	12
<i>90% City Review</i>	48	4
DAF Thickening Process Improvements 100% Design	56	8
1.6 Permit Documents		
DAF Thickening Process Improvements	56	8
1.7 Project Meetings	-	-
Task 2 – Bidding Services		
DAF Thickening Process Improvements	68	12

PAYMENT SCHEDULE

Task	Task Description	Percent of Total Fee	Fee
1	Design Services	95.2	\$269,876
1.2	Preliminary Analysis TM (PATM)		\$26,882
1.4	Design for Bidding (60%, 90% and 100%)		\$209,037
1.5	Estimate of Cost of Construction		\$16,024
1.6	Permit Documents (Milestone 1)		\$12,198
1.7	Project Meetings		\$5,735
2	Bidding Services	4.5	\$12,739
	Reimbursable Expenses	0.3	\$1,000
	TOTAL	100	\$283,615