MEMORANDUM

DATE:

November 10, 2021

TO:

****ORIGINAL****

City Clerk

FROM:

Robyn Holder, CPPB

Procurement Management Department

SUBJECT:

Record Retention

CONTRACT:

#20170132 Amendment #6

CONTRACT TITLE:

Design Services for the Westport Wastewater Treatment Plant

Expansion

VENDOR NAME:

CHA Consulting, Inc.

VENDOR ADDRESS:

1016 Spring Villas Pt.

CITY & STATE:

Winter Park, FL 342708

APPROVED BY COUNCIL: February 26, 2018

7b)- Design Services for the Westport Wastewater Treatment Plant Expansion – Phase 1

Contract #20170132. Contract Period is 7/1/2019 to 2/5/2020

Amendment #1 Amount: \$73,197.55

APPROVED BY COUNCIL: July 27, 2020

7h) – Design Services for the Westport Wastewater Treatment Plant Expansion – Phase 1 –

Contract #20170132. Contract period 2/6/2020 to 4/28/2020.

Amendment #2 Amount: \$119,772.50

APPROVED BY COUNCIL: 7/27/2020

Amendment #3 Amount: (\$96,289.50) Contract end date: 3/13/2023

Amendment #4 Amount: \$63,235.00 Contract end date: 9/30/2024

Council approval: N/A

Amendment #5: Assignment & Assumption Agreement for the name change to CHA

Consulting, Inc.

APPROVED BY COUNCIL: 11/8/2021

Amendment #6 Amount: \$1,173,033.47 with a new end date of 4/14/2025.



CONTRACT AMENDMENT

This amendment by and between the Contractor and the City as defined below shall be effective as of the date this Amendment is fully executed.

Contractor's Full Legal Name:	CHA Consulting, Inc. fka Reiss Engineering, inc.
Solicitation No./Event ID:	20170132
Solicitation Title/Event Name:	Design Services for the Westport Wastewater Treatment Plant Expansion
Contract Award Date:	2/26/2018
Initial Current Contract Term:	3/13/2018 - 3/13/2023
Current Contract Expiration Date:	9/30/2024
Requested Contract Expiration Date:	4/14/2025
Initial Contract Amount:	\$3,877,175.00
Current Contract Amended Amount:	\$4,037,090.75
Requested Financial Change Amount:	\$1,173,033.47
New Contract Amount:	\$5,210,124.22
Amendment No.:	6
Amendment Type:	Increase of Commodities

WHEREAS, the Contract is in effect through the Current Contract Term as defined above; and

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties do hereby agree as follows:

A. BACKGROUND

During the bidding phase for Part 2, new effluent treatment standards were established by FDEP for public access reuse (PAR) in the January 2020, St. Lucie River and Estuary Basin Management Action Plan (BMAP). The BMAP established PAR annual average effluent treatment standards for total nitrogen of 10 mg/L and total phosphorus of 6.0 mg/L which require the City of Port St. Lucie (City) to adjust the improvements needed at the facility.

CHA Consulting, Inc. (CHA) completed a Nutrient Reduction Study in August 2021 that evaluated various process improvements/additions to meet the new BMAP effluent limits. The Study concluded that proceeding with the existing MLE treatment process improvements, as identified in the May 2021 Basis of Design Report, would allow the City to meet the BMAP effluent limits, for nitrogen, at the time of the Westport WWTF's next permit renewal.

The City has requested CHA proceed with preliminary engineering, permitting, final design, bidding, and construction services for the proposed Nutrient Reduction Improvements, as described in the May 2021 Basis of Design Report, to comply with the new BMAP regulations.

In addition, the City has requested that CHA proceed with one additional bid package to include the flow equalization system improvements, to be constructed in the future.

The Scope of Services described herein have been developed based on the following:

- 1. Preliminary Engineering, permitting, final design, bidding, and construction services for the nutrient reduction improvements identified in the Basis of Design report, in addition to several items recommended in the Nutrient Reduction Study, to meet the BMAP effluent limits (Part 2A). These improvements include a new fine screen, new tray-separation grit removal system, new fourth MLE treatment train, replacement of existing IR pumps with larger (4Q) pumps, and replacement of existing surface aeration equipment with fine bubble diffused aeration systems.
- 2. Development of one additional bid set for flow equalization system improvements (Part 2B).

B. SCOPE OF SERVICES

Engineer will assist the City in the implementation of the Westport WWTF Improvements project. This Contract authorizes the Engineer to perform preliminary engineering, permitting, final design, bidding, and construction phase services for making improvements to the plant to meet the treatment needs of the Westport service area. This scope is based on an anticipated treatment need to meet the following capacities, as provided by the City:

- 5.36 MGD Annual Average Day Flow
- 6.00 MGD Maximum Month Average Day Capacity
- 7.93 MGD Peak Day Capacity

PART 2 - FACILITY IMPROVEMENTS

The facility improvements will include new facilities required to meet the promulgated BMAP effluent limits for nitrogen (Part 2A) and to improve treatment performance during peak hydraulic and biological loadings through flow equalization system improvements (Part 2B). These improvements will consist of two (2) separate bid packages (Part 2A and Part 2B) as shown below.

Part 2A Improvements for BMAP Compliance

- <u>Pre-Treatment Screening and Grit Removal</u> New influent screens to replace the existing screen, and one (1) new tray-separation grit removal system (HeadCell) are anticipated.
- <u>Process Basins</u> One (1) new aeration basin and associated equipment are anticipated. Turbo blowers in a sound attenuated blower/electrical building are anticipated. Fine bubble diffused aeration systems are anticipated in the new and existing basins. Removal of the existing surface aeration equipment (to be replaced with fine bubble diffused aeration systems) is anticipated.

- <u>Internal Recycle Pumps</u> Replacement of the existing internal recycle (IR) pumps with larger 4Q IR pumps within existing aeration basins and installation of new 4Q IR pumps within new aeration basin is anticipated.
- <u>Filtration System Improvements</u> Refurbishment of all existing deep bed filters and conversion to an upgraded EcoWash system is anticipated.
- Electrical System Additions/Modifications Upgrading the electrical distribution system to meet EPA Class 1 reliability to avoid common mode failures is anticipated. Building additions or new buildings will be required for new electrical equipment. New Main Electrical Building No. 1 with two main breakers, two automatic transfer switches, two switchboards with associated MCC feeder breakers. New blower/electrical building (Electrical Building No. 2) to house the turbo blowers, power distribution equipment, VFDs, process control panel, step-down transformer, and lighting panel for miscellaneous loads. Modifications to existing Old MCC/Generator Building No. 1 (Electrical Building No. 3) and existing Old MCC/Generator Building No. 2 (Electrical Building No. 4) based on the design requirements described above. Modifications to the existing MCCs is limited to reducing the current feeder ampacity, addition of main MCC breakers and showing field equipment being demolished. No upgrades to the existing standby generators or standby capacity are included. Existing generators will be connected to new automatic transfer switches in the Main Electrical Building No. 1. Upgrading equipment and systems to meet requirements of NFPA 820 is anticipated. Increasing the number of circuits to the existing SCADA Room in the existing Administration Building is anticipated.
- Instrumentation and Control System Additions/Modifications Upgrading the existing obsolete PLCs with new PLCs in their current locations and upgrading the SCADA servers with new units including OS and HMI software upgrades are anticipated. Addition of new blower/electrical building process control panel, internal recycle pump controls, and associated design changes as described above. Design to include DO/ORP control programming for the blowers. Providing I&C requirements for the alternate items listed below is also anticipated.

Part 2B Improvements to Flow Equalization System

- One (1) new 600,000-gallon flow equalization tank, adjacent to the existing tank, with submersible mixing equipment is anticipated.
- Demolition of the existing flow equalization tank's surface mixing equipment to maximize storage volume (by raising water level), and installation of new submersible mixers is anticipated.
- Replacement of existing flow equalization transfer pumps with new, larger pumps is anticipated.
- Odor control system and dome covers for both tanks are anticipated.

TASK 1A. PROJECT ADMINISTRATION (PART 2) FOR BMAP COMPLIANCE (PART 2A)

Kick-Off Meeting

Engineer will prepare for and attend a project "kick-off" meeting with all associated Team members, including the City's representatives to discuss the project goals and objectives, clarify team roles and assignments, as well as establish the project schedule and deliverables.

Progress Meetings

Engineer will prepare for and attend progress meetings to be held monthly during the design and bidding phases with the City to review progress of the project and project schedule. The Engineer will prepare and submit meeting summaries within 5 business days of the progress meetings, as necessary. Up to fourteen (14) progress meetings are anticipated during the design and bidding phases in addition to the design review meetings and other workshops listed below.

General Project Administration

Engineer will perform general project coordination and management activities, including general administrative activities for this authorization, as well as specific coordination activities with the team members, including the City's staff and other representatives and other key team members.

Engineer will prepare and submit to the City invoices for this assignment. The invoice will include percent complete for each task to advise and highlight the overall progress of the permitting, design, construction, and post construction services tasks, as well as identify items completed, on-going and pending activities.

TASK 1B. PROJECT ADMINISTRATION (PART 2) FOR FLOW EQUALIZATION SYSTEM (PART 2B)

Engineer will attend an additional three (3) progress meetings and perform general project administration for an additional three (3) months.

TASKS 2 THROUGH 7 (Part 1)

No changes are proposed for Tasks 2 through 7, these services have been completed.

TASK 8A. PROVIDE ADDITIONAL PRELIMINARY ENGINEERING SERVICES (PART 2) FOR BMAP COMPLIANCE (PART 2A)

Engineer will perform preliminary engineering services for the Westport WWTF Part 2A Improvements to meet the new BMAP effluent limits. The Engineer will:

- Perform a site visit to coordinate with plant operations personnel and other key design team members to facilitate obtaining the technical information necessary to support preliminary engineering and final design.
- Prepare Preliminary Design Report and 30 percent design drawings addressing:
 - 1. Overall Liquid Process Flow Diagram and Process Sizing
 - 2. Overall Solids Process Flow Diagram and Process Sizing
 - 3. Proposed Site Plan
 - 4. Hydraulic Profile
 - 5. Electrical Power Distribution Site Plan
 - 6. Single Line Power Distribution Diagram and Emergency Power Supply
 - 7. Switchgear, MCC Elevations and Load Calculations
 - 8. Overall Process Instrumentation and Controls Diagram
 - 9. SCADA Architecture Diagram
 - 10. Preliminary Opinion of Probable Cost

A draft and final Preliminary Design Report with 30 percent drawings will be provided to the City with a workshop/review meeting with City staff after the draft document is submitted to the City.

TASK 8B. PROVIDE ADDITIONAL PRELIMINARY ENGINEERING SERVICES (PART 2) FOR FLOW EQUALIZATION SYSTEM (PART 2B)

Engineer will perform preliminary engineering services for a new flow equalization system as part of the Westport WWTF **Part 2B** Improvements. The Engineer will:

- Coordinate the activities of the geotechnical engineer to provide field geotechnical work and a geotechnical report with foundation and dewatering recommendations. The following borings are anticipated: (2) borings to a depth of 50 feet for the proposed equalization tank.
- Develop the Basis of Design for a flow equalization system. The BOD document will use the City-provided 5.36 MGD (ADF) flow and will establish an optimal equalization volume and system reliability requirements that will be used to size system unit components. A draft and final Basis of Design Report will be provided to the City with a workshop/review meeting with City staff after the draft document is submitted to the City.
- Use the Basis of Design Report for the flow equalization system to revise the Preliminary Design Report being prepared under Task 8A as part of a separate submittal.

TASK 9A. ADDITIONAL PERMITTING (PART 2) FOR BMAP COMPLIANCE (PART 2A)

Pursuant to the Contract, the Engineer will perform permitting services for the Westport WWTF Part 2A Improvements to meet the new BMAP effluent limits. The Engineer will:

Prepare and Submit FDEP Domestic Wastewater Permit Revision Application Package

- Communicate with FDEP on the requirements for modifying the existing construction permit.
 Engineer will coordinate, prepare for, and attend a pre-application meeting with the FDEP staff to facilitate the processing of this permit modification.
- Prepare and submit supporting documents to the permit revision package as needed by FDEP.
 These documents will include a detailed revised Preliminary Design Report (PDR), which includes introduction, regulatory design requirements, basis of design for treatment facilities, and associated drawings and figures to support the Westport WWTF Improvements
- Prepare responses to Requests for Additional Information (RAIs) provided by FDEP during the permit review process (if necessary).

Prepare and Submit an ERP Permit Revision Application Package

- Communicate with South Florida Water Management District (SFWMD) on the permit revision requirements and sufficiency of the permit application and supporting documents.
- Prepare the SFWMD environmental resource permit (ERP) revisions for any changes to the 2009 plans which affect storm water at the Westport WWTF. The permit revision application will be submitted to SFWMD to apply for a permit revision if needed.
- Prepare responses to Requests for Additional Information (RAIs) provided by SFWMD during the permit review process (if necessary).

Allowance for Permit Application Fees

• This task is an allowance for the City related to costs associated with the permitting application requirements for the project. This is anticipated to be a major modification.

TASK 9B. ADDITIONAL PERMITTING (PART 2) FOR FLOW EQUALIZATION SYSTEM (PART 2B)

Pursuant to the Contract, the Engineer will perform permitting services for the Westport WWTF **Part 2B** Improvements for the flow equalization system

Prepare and Submit FDEP Domestic Wastewater Permit Revision Application Package

- Communicate with FDEP on the requirements for modifying the existing construction permit. Engineer will coordinate, prepare for, and attend a pre-application meeting with the FDEP staff to facilitate the processing of this permit modification.
- Prepare and submit supporting documents to the permit revision package as needed by FDEP.
 These documents will include a detailed revised Preliminary Design Report (PDR), which includes introduction, regulatory design requirements, basis of design for treatment facilities, and associated drawings and figures to support the Westport WWTF Improvements
- Prepare responses to Requests for Additional Information (RAIs) provided by FDEP during the permit review process (if necessary).

Prepare and Submit an ERP Permit Exemption Letter

Prepare and submit supporting documentation that an ERP permit revision is not required.

Allowance for Permit Application Fees

• This task is an allowance for the City related to costs associated with the permitting application requirements for the project. This is anticipated to be a major modification.

TASK 10A. ADDITIONAL FINAL DESIGN (PART 2) FOR BMAP COMPLIANCE (PART 2A)

Engineer shall provide final design documents for the Westport WWTF Improvements Part 2 that consist of preparing drawings and specifications for improvements to the existing wastewater treatment facility as approved by the City and consistent with the Preliminary Design Report.

The City will engage the services of a Construction Manager at Risk (CMAR) to provide construction services for the main project. CHA will work collaboratively with the selected CMAR and City to develop the final design to a 100 percent level of completion. The construction documents shall be complete and be usable for competitive bids of the construction trade contracts by the CMAR and subsequent construction of the Project. The CMAR contractor will provide constructability reviews, sequence of construction and cost estimates for each design submittal. Design services will include submittal of construction documents at the 60, 90, and 100 percent level of completion. The following specific tasks will be performed:

Prepare final design documents to a 60 percent completion level for the City's Review and Comment

- Prepare general drawings to a 60 percent completion level.
- Prepare civil drawings that include site plans/geometry, paving, grading, and landscaping to a 60 percent completion level.
- Prepare civil drawings for yard piping and utilities modifications with details based on field verified utility locations to a 60 percent completion level.
- Prepare architectural and structural drawings to a 60 percent completion level.
- Prepare mechanical process drawings for the treatment processes, pumps, disinfectant addition system, to a 60 percent completion level.
- Prepare electrical drawings including the site electrical plan, power and control, lighting and receptacles, lightning protection, motor control centers, single line diagrams, panel schedules, light fixture schedules, and details to a 60 percent completion level.
- Prepare instrumentation drawings for the proposed panels to the City's SCADA system to a 60
 percent completion level. The drawings will be reviewed by a system integrator provided by the
 CMAR familiar with the City's SCADA system.
- Prepare HVAC drawings to a 60 percent completion level.
- Prepare a 60 percent set of Technical Specifications (Project Manual). The instrumentation and control specifications will be reviewed by a system integrator provided by the CMAR familiar with the City's SCADA system.
- Submit 60 percent design package to the City and the CMAR.
- Coordinate and attend one (1) meeting with the City and CMAR to review 60 percent design level review comments.

Prepare final design documents to a 90 percent completion level for the City's Review and Comment

- Prepare general drawings to a 90 percent completion level based on the City's and CMAR's comments on the 60 percent design drawings.
- Prepare civil drawings that include site plans/geometry, paving, and grading to a 90 percent completion level based on the City's and CMAR's comments on the 60 percent design drawings.
- Prepare civil drawings for yard piping and utilities modifications with details based on field verified utility locations and the City's comments on the 60 percent design drawings to a 90 percent completion level.
- Prepare architectural and structural drawings to a 90 percent completion level based on the City's comments on the 60 percent design drawings.
- Prepare mechanical process drawings for the treatment processes to a 90 percent completion level based on the City's comments on the 60 percent design drawings.
- Prepare electrical drawings including the site electrical plan, power and control, lighting and

receptacles, lightning protection, motor control centers, single line diagrams, panel schedules, light fixture schedules, and details to a 90 percent completion level based on the City's comments on the 60 percent design drawings. The drawings will be reviewed by a system integrator provided by the CMAR familiar with the City's SCADA system

- Prepare instrumentation drawings for the proposed panels to the City's SCADA system to a 90
 percent completion level based on the City's comments on the 60 percent design drawings. The
 drawings will be reviewed by a system integrator provided by the CMAR familiar with the City's
 SCADA system.
- Prepare HVAC drawings to a 90 percent completion level.
- Prepare a complete 90 percent design set of Technical Specifications (Project Manual) based on the City's and CMAR's comments on the 60 percent documents.
- At the end of the 90 percent design completion level assemble and submit contract documents to the City (including a submission to City Building Department) and CMAR for review and comments.
- Coordinate and attend one (1) meeting with the City and CMAR to review 90 percent design level review comments.

Prepare final design documents to a 100 percent completion level

- Update and prepare general, civil drawings, architectural drawings, structural drawings, process mechanical drawings, electrical drawings, instrumentation drawings, and HVAC drawings to a 100 percent completion level based on previous design submittals and the City's and CMAR's review comments.
- Finalize complete set of Technical Specifications (Project Manual).
- At the end of the 100 percent design completion level assemble and submit contract documents to the City and CMAR.

TASK 10B. ADDITIONAL FINAL DESIGN (PART 2) FOR FLOW EQUALIZATION SYSTEM (PART 2B)

Engineer shall provide separate final design documents for the Westport WWTF Improvements Part 2 that consist of preparing drawings and specifications for improvements to the existing wastewater treatment facility as approved by the City and consistent with the revised Preliminary Design Report for the flow equalization system. Tasks to be performed are as follows:

Prepare final design documents to a 60 percent completion level for the City's Review and Comment

- Prepare general drawings to a 60 percent completion level.
- Prepare civil drawings that include site plans/geometry, paving, grading, and landscaping to a 60 percent completion level.
- Prepare civil drawings for yard piping and utilities modifications with details based on field verified utility locations to a 60 percent completion level.
- Prepare architectural and structural drawings to a 60 percent completion level.
- Prepare mechanical process drawings for the treatment processes, pumps, disinfectant addition system, to a 60 percent completion level.
- Prepare electrical drawings including the site electrical plan, power and control, lighting and receptacles, lightning protection, motor control centers, single line diagrams, panel schedules, light fixture schedules, and details to a 60 percent completion level.
- Prepare instrumentation drawings for the proposed panels to the City's SCADA system to a 60
 percent completion level. The drawings will be reviewed by a system integrator familiar with the
 City's SCADA system.
- Prepare a 60 percent set of Technical Specifications (Project Manual). The instrumentation and control specifications will be reviewed by a system integrator familiar with the City's SCADA system.
- Submit 60 percent design package to the City.

- Coordinate and attend one (1) workshop with the City to review 60 percent documents.
- At the end of the 60 percent design completion level, assemble and submit contract documents to the City for review and comments.
- Conduct a 60 percent design review meeting with the City to discuss comments.

Prepare final design documents to a 90 percent completion level for the City's Review and Comment

- Prepare general drawings to a 90 percent completion level based on the City's comments on the 60 percent design drawings.
- Prepare civil drawings that include site plans/geometry, paving, and grading to a 90 percent completion level based on the City's comments on the 60 percent design drawings.
- Prepare civil drawings for yard piping and utilities modifications with details based on field verified utility locations and the City's comments on the 60 percent design drawings to a 90 percent completion level.
- Prepare structural drawings to a 90 percent completion level based on the City's comments on the 60 percent design drawings.
- Prepare mechanical process drawings for the treatment processes to a 90 percent completion level based on the City's comments on the 60 percent design drawings.
- Prepare electrical drawings including the site electrical plan, power and control, lighting and
 receptacles, lightning protection, motor control centers, single line diagrams, panel schedules,
 light fixture schedules, and details to a 90 percent completion level based on the City's comments
 on the 60 percent design drawings.
- Prepare instrumentation drawings for the proposed panels to the City's SCADA system to a 90
 percent completion level based on the City's comments on the 60 percent design drawings.
- Prepare a complete 90 percent set of Technical Specifications (Project Manual) based on the City's comments on the 60 percent documents.
- Coordinate and attend one (1) workshop with the City to review 90 percent documents.
- At the end of the 90 percent design completion level assemble and submit contract documents to the City (including a submission to City Building Department) for review and comments.
- Conduct a 90 percent design review meeting with the City to discuss comments.

Prepare final design documents to a 100 percent completion level

- Update and prepare general, civil drawings, architectural drawings, structural drawings, process mechanical drawings, electrical drawings and instrumentation drawings to a 100 percent completion level based on previous design submittals and the City's review comments.
- Finalize complete set of Technical Specifications (Project Manual).
- At the end of the 100 percent design completion level assemble and submit contract documents to the City.

TASK 11A. ADDITIONAL BIDDING SERVICES (PART 2) FOR BMAP COMPLIANCE (PART 2A)

Construction Manager at Risk (CMAR) Procurement and Trade Package/Subcontractors
The CMAR procurement process will be concluded prior to CHA producing 60 percent design
documents.

- CMAR Procurement
 - a. Provide input to City on the qualifications portion of the CMAR procurement document.
 - b. Provide input to City on the pricing elements that could be included with the CMAR procurement.
 - c. Prepare a description of the pre-construction services, general conditions, bonds and insurance, overhead & profit to be used in the CMAR procurement.
 - d. Attend CMAR pre-proposal meeting.
 - e. Provide input to City (as requested) regarding CMAR submittals.

- Trade Packages and Subcontractors
 - Provide input to City regarding CMAR's proposed construction trade packages to be competitively bid.
 - b. Provide input to City on proposed sub-contractors.
 - c. Provide input to City on acceptability of proposed equipment and material suppliers not named in the construction documents.

CMAR Project On-Boarding Workshop and Site Visit

Engineer shall conduct a half-day project kickoff and on-boarding workshop with the City and CMAR to review the PDR, design workflow, overall project schedule, and to establish a collaborative teaming environment. CHA will solicit initial input from the CMAR on the project's constructability and construction sequencing. A site visit will follow the workshop.

After the workshop, the CMAR will initiate a review of the PDR. The review is expected to include:

- Constructability review
- Risk assessment/quantification
- Construction scheduling/sequencing

CMAR will submit review comments to the Engineer in Excel format within three (3) weeks of the workshop. CHA will address comments as part of the 60 percent construction documents.

Guaranteed Maximum Price (GMP) Development Assistance

- The CMAR will develop the GMP based on the 100 percent drawings and specifications that are developed after the 90 percent review meeting.
- CHA will respond up to fifty (50) RFIs from the CMAR through the GMP development process.
- CHA will respond to CMAR questions and concepts regarding the plans & specifications, construction sequencing, maintenance of plant operations (MOPO), start-up requirements, etc. CHA will respond to CMAR requests for design clarifications and additional information.
- CHA will support City with a review of the CMAR's GMP and prepare comments in excel format
 for discussion at a GMP review meeting. Decisions made during the meeting will be logged and
 used by the CMAR to finalize the GMP for presentation to City. If the GMP is accepted, the
 CMAR will initiate construction services upon City approval.

TASK 12A. CONSTRUCTION PHASE SERVICES (PART 2) FOR BMAP COMPLIANCE (PART 2A)

Engineer will provide services during the construction phase of the base project based on the scope below. The previous scope for Task 12 is deleted in its entirety. The duration of construction phase services is based on approximate 22-month construction contract for the Westport WWTF Part 2A Improvements. These services are based on an expectation that document control will be managed via an electronic document control system such as ECOMM or similar, as will be identified in the technical specifications. Engineer will perform the following tasks to assist the City during construction of to ensure that the project was completed in general conformance with the approved construction documents:

Assist the City in Construction Phase Services

Engineer will perform the following:

- Construction Administration The Engineer will administer the project in conformance with the Construction Contract and its General Conditions. The Engineer will coordinate with the Contractor and the City during construction.
- Conform Contract Documents Engineer will conform the contract documents prior to construction and provide a conformed set with all addendum information incorporated.
- Preconstruction Conference Prepare Agenda and attend the City's preconstruction conference with the Contractor. The Engineer will prepare and submit meeting summary within 5 business days of progress meeting.

- **Design Clarification Responses** Provide technical interpretation of the drawings, specifications, and Contract Documents, and evaluate requested deviation from the approved design or specification, and issue field orders as necessary.
- **Submittal Review** Review shop drawings and other data that the Contractor is required to submit. These shall be reviewed for general conformance with the design concept of the projects and general compliance with the information given in the Contract Documents. Up to two hundred (200) submittals are anticipated (including re-submittals).
- **RFI Responses** Review and respond to requests for information (RFI) from the Contractor. Up to one hundred (100) RFIs are anticipated.
- **Materials and Density Testing Services** Review Contractor's testing results during construction to ensure compliance with Contract Document Specifications.
- **Pay Request Review** Review, recommend and submit to the City for payment the monthly pay request from the Contractor.
- Site Visits Make up to twenty (20) periodic site visits (by CHA) to observe the progress and
 quality of the work and to determine, in general, if the work is proceeding in accordance with the
 intent of the Contract Documents for the Westport WWTF Improvements. Four (4) additional site
 visits are included for establishment of substantial and final completion of Part 2 of the project.
- Certificate of Completion for Part 2 Facility Improvements Engineer will prepare FDEP certificate of completion of construction and submit to FDEP for approval.
- Record Drawings Prepare record drawings by transcribing information provided by the
 Contractor. Engineer will revise original design drawings of the project and submit to the City
 within 30 working days of the final completion date, one set of drawings and an electronic file
 (AutoCAD) of the record drawing using information supplied by the Contractor(s), onsite
 representative personnel, supplier, the City's personnel, and other sources. The Engineer is not
 responsible for any errors or omissions in the information from others that is incorporated into the
 record drawings. As-built drawings will include finish floor elevations, tank elevations, pump
 centerline elevations and yard piping locations/elevations.
- Project Close-out Make final review of construction to determine if work was completed in general conformance of the Contract Documents. Assist in negotiating the final payment for construction and submit a final letter report upon which final settlement and termination of Contract can be based.
- Operation and Maintenance (O&M) Manuals Review Contractor supplied O & M Manuals for the Westport WWTF Improvements Part 2 – Facility Improvements. O&M manuals will include master list of spare parts. In addition, original warranties will be contained in one (1) separate binder with one (1) additional binder and two (2) sets in electronic format of copies of the warranties provided.

TASK 13. RESIDENT PROJECT REPRESENTATIVE (PART 2)

This task is to be performed by others. All scope and fees have been removed.

TASK 14. POST-CONSTRUCTION OPTIMIZATION AND WARRANTY SERVICES No change to this task is proposed.

DELIVERABLES

The Engineer will provide the City the following deliverables:

- Preliminary Design Report and 30 Percent Drawings for the Part 2A Improvements.
- Workshop agenda and summary.
- Five (5) copies of drawings at the scheduled 60, 90, and 100 percent Final Design for review by the City. The Final 100 percent design drawings will be submitted to the City as five (5) full size drawing sets and three (3) half-size drawing sets in the format requested by the City.
- CMAR GMP review comments.
- CMAR subcontractor bid review comments.
- Five (5) copies of the Permit application packages required for submittal for regulatory agency review.
- Two (2) copies of 100 percent drawings (and one (1) copy of the AutoCAD and PDF electronic files).
- Four (4) copies of conformed documents (and one (1) copy of the AutoCAD and PDF electronic files).
- Two (2) copies of record drawings (and one (1) copy of the AutoCAD and PDF electronic files).
- Draft and final technical memorandums for Post-Construction Services.
- Basis of Design Report, revised Preliminary Design Report, and 30, 60, 90, and 100 percent Final Design drawings and Technical Specifications for the Flow Equalization System (PART 2B).

C. TIME OF PERFORMANCE

Engineer shall perform services in Tasks 1 through 14 as follows:

TASK	COMMENCING	DAYS
Task 1A – Project Administration for BMAP Compliance		413
(Part 2A)	From Date of	
	Amendment No. 6 NTP	
Task 1B – Project Administration for Flow Equalization	Amendment No. 0 NTI	553
System (Part 2B)		
Task 8A – Additional Preliminary Engineering for BMAP		77
Compliance (Part 2A)	From Date of	
	Amendment No. 6 NTP	
Task 8B – Additional Preliminary Engineering for Flow	, and an an area of the	133
Equalization System (Part 2B)		
Task 9A – Additional Permitting for BMAP Compliance	From Date of Final PDR	100
(Part 2A)	Submission to FDEP	
Task 10A – Additional Final Design for BMAP		273
Compliance (Part 2A)	From Date of Final FDR	
	Submission to FDEP	
Task 10B – Additional Final Design for Flow Equalization		
System (Part 2B)		357
Task 11 – Additional Bidding Services for BMAP	From Date of	413
Compliance (Part 2A)	Amendment No. 6 NTP	
Task 12 – Construction Phase Services for BMAP	From Date of Final GMP	665
Compliance (Part 2A)	Development	
Task 14 – Post Construction Optimization Services for	From Date of Final Construction	182
BMAP Compliance (Part 2A)	Completion	102

SCHEDULE NOTES:

- Schedule includes 14 days for the City to review of each deliverable. The Schedule will be adjusted according to the actual review time by the City.
- Anticipates 30-day approval period, 30-day bid advertisement, and 30-day period to award.
- Schedule only includes initial review period from regulatory agencies, which is typically 30 days.

- Schedule does not include time for potential "Requests for Additional Information" from FDEP reviewers or other regulatory agencies.
- Engineer will observe the time limitations; however, should there be delays in receiving information from
 others and in obtaining subsequent authorization, approvals, and review comments from the City, and other
 governmental agencies, the schedule will be updated and adjusted as mutually agreed upon by the
 Engineer and the City. Engineer shall not be responsible for delays that occur as the result of action or
 inaction by others.
- The City will issue the Notice-to-Proceed to the Contractor for construction projects.
- Schedule for Part 2B (Flow Equalization Improvements) only includes days through design and permitting. Schedule for services during construction are not included.

The total duration for this Amendment No. 6 Scope of Services is 1,260 days. This results in a net increase of 196 days, representing a new date of completion of 4/14/2025.

D. COMPENSATION

TASK	Amendment No. 6 Fee
Task 1A: Project Administration (Part 2A)	\$118,120.00
Task 2B: Project Administration (Part 2B)	\$21,680.00
Task 6: Construction Phase Services (Part 1)	(\$17.00)
Task 8A: Additional Preliminary Engineering Services (Part 2A)	\$110,192.00
Task 8B: Additional Preliminary Engineering Services (Part 2B)	\$57,805.85
Geotech, SUE, Survey	\$3,900.00
Task 9A: Additional Permitting (Part 2A)	\$32,468.69
Permit Fees	\$5,300.00
Task 9B: Additional Permitting (Part 2B)	\$3,615.00
Permit Fees	\$800.00
Task 10A: Additional Final Design (Part 2A)	\$818,673.00
Task 10B: Additional Final Design (Part 2B)	\$112,747.93
Task 11A: Additional Bidding Services (Part 2A)	\$79,166.00
Task 12A: Construction Phase Services (Part 2A)	(\$180,960.00)
Task 16: Nutrient Reduction Study	(\$10,458.00)
TOTAL	\$1,173,033.47

E. SERVICES NOT INCLUDED

The following services may be required for the Project, but are not included in this authorization:

- Site Plan Approval permitting.
- Building Department permitting.
- Permitting for potable water mains.
- Preparation of a dewatering plan covering construction dewatering activities that could be needed for SFWMD or FDEP permits.
- Wetland delineation and mitigation.
- Threatened or endangered species studies.
- Design modifications resulting from value engineering.
- Alternate, substitute or "or equal" equipment evaluations.
- Bidding and Construction Services for Part 2B.
- Assistance for funding or other services beyond that included in the Project Budget.
- 60, 90, and 100 percent Opinion of Probable Construction Costs (to be provided by CMAR).

F. CITY'S RESPONSIBILITY

In addition to the City's responsibilities pursuant to the Contract, the City will:

- Provide all available data, plans, and equipment information for the City's existing facilities in the
 project area. The Engineer is entitled to rely on data provided by the City without independent
 review and verification.
- Review and approve all submittals made by the Engineer to the City as set forth herein.
- Provide information related to archeological, historical resources, wetland delineation and listed species if applicable.
- Agree that Engineer shall not be liable for claims, liabilities or losses arising out of, or connected with the decline of accuracy or readability of electronic data due to inappropriate storage conditions or duration.

G. SUCCESSORS AND ASSIGNS

This Amendment shall be binding upon and inure to the benefit of the successors and permitted assigns of the parties hereto.

H. ENTIRE AGREEMENT

Except as expressly modified by this Amendment, the contract shall be and remain in full force and effect in accordance with its terms and shall constitute the legal, valid, binding and enforceable obligations to the parties. This Amendment and the contract (including any written amendments thereto), collectively, are the complete agreement of the parties and supersede any prior agreements or representations, whether oral or written, with respect thereto.

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IN WITNESS WHEREOF, the parties have caused this Amendment to be duly executed by their authorized representatives.

CONTRACTOR

Contractor's Full Legal Name: (PLEASE TYPE OR PRINT)	CHA Consulting, Inc.
Authorized Signature:	Nobert Nein
Printed Name and Title of Person Signing:	C. Robert Reiss, Florida Water Project Team Leader
Date:	October 28, 2021
Company Address:	1016 Spring Villas Pt. Winter Springs, FL 32708

THE CITY OF PORT ST. LUCIE

Authorized Signature:	Caroline Striges
Printed Name and Title of Person Signing:	Caroline Sturgis, Director, Office of Management & Budget, and Procurement
Date:	11/12/2021
City Address:	121 S.W. Port St. Lucie Blvd., Port St. Lucie, FL 34984