

CITY OF PORT ST. LUCIE
CONTRACT #20170132
Design Services for the Westport Wastewater Treatment Facility Expansion

This CONTRACT, executed this 5 day of March, 2018, by and between the CITY OF PORT ST. LUCIE, FLORIDA, a municipality of the State of Florida, hereinafter called "City" party of the first part, and *REISS ENGINEERING, INC., 1016 Spring Villas Pt., Winter Springs, FL 32708* hereinafter called "Engineer", party of the second part.

RECITALS

In consideration of the below agreements and covenants set forth herein, the parties agree as follows:

SECTION I
RECITALS

WHEREAS, Engineer is licensed in the State of Florida and *REISS ENGINEERING, INC.* is a Florida Corporation in the State of Florida; and

WHEREAS, the City wishes to contract for Design and CEI; and

WHEREAS, Engineer is qualified, willing and able to provide the Work on the terms and conditions set forth herein; and

WHEREAS, the City desires to enter into this Contract with Engineer to perform the Work specified and in an amount agreed to below.

NOW THEREFORE, in consideration of the premises and the mutual covenants herein name, the Parties agree as follows:

The Recitals set forth above are hereby incorporated into this Contract and made a part of hereof for reference.

SECTION II
NOTICES

Project Manager: Richard M. Schoenborn, P.E., Senior Civil-Utility Engineer
City of Port St Lucie, Utility Systems Department
121 SW Port St Lucie Blvd.
Port St Lucie, FL 34984
Telephone: (772) 873-6485
Email: rshoenborn@Cityofpsl.com

City Contract Administrator: June Raymond, Buyer
City of Port St. Lucie Procurement Management Department
121 SW Port St. Lucie Blvd.
Port St. Lucie, Florida 34984
Telephone: 772-344-4055 Fax: 772-871-7337
Email: jraymond@cityofpsl.com

Engineer: REISS ENGINEERING, INC.
Robert Reiss, PhD, PE
1016 Spring Villas Pt.
Winter Springs, FL 32708
Telephone: 407-679-5358 Fax: 407-679-5003
Email: crreiss@reisseng.com

SECTION III DESCRIPTION OF SERVICES TO BE PROVIDED

The specific work that the Engineer has agreed to perform is to provide the following:

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

- 10.71 MGD Annual Average Day Flow
- 12.00 MGD Maximum Month Average Day Capacity
- 15.85 MGD Peak Day Capacity

This Scope includes two (2) parts as follows:

PART 1 – PROCESS IMPROVEMENTS

Part 1 of the expansion project shall include critical plant process improvements to correct current operational issues. The improvements proposed for this part of the project include the following:

- Improve Flow Splitting to Clarifiers – A new flow splitter box and associated piping are anticipated.
- Improve Plant Drainage System and In-Plant Pump Station Capabilities – Structure modifications, new drainage system piping and piping modifications, and up to three (3) new in-plant pump stations are anticipated.
- Chlorine Contact Chamber Overflow Modifications – Existing piping and structure modifications are anticipated.
- In-Plant Reuse System Supply Modifications – CCC structure modifications and associated piping modifications are anticipated.
- Clarifier RAS Piping Flow Improvements – Existing piping cleaning and/or modifications are anticipated.

No architectural, plumbing or HVAC services are anticipated for Part 1 of the expansion as no new buildings or building modifications are anticipated. Process controls shall be based on modifications to the existing system as the new process control system shall not be in place until Part 2.

PART 2 – FACILITY EXPANSION

The facility expansion shall include improvements for expanding the capacity of the treatment facility. The new facilities proposed include the following:

- Pre-Treatment Screening and Grit Removal Additions – A new influent screen and grit removal unit are anticipated.
- Aeration Process Additions – New aeration basins and associated equipment are anticipated. Aeration basin/system sizing to account for no flow equalization.
- Clarification Process Additions – A new clarifier (same size and diameter as the existing clarifiers) and associated equipment are anticipated.
- Chlorine Feed System Additions – A new chlorine storage and feed system utilizing a carrier water system with gaseous chlorine is anticipated. A new CMU gaseous chlorine storage and feed building (with Stucco finish) matching existing buildings on site is anticipated for the gaseous chlorine system.
- Electrical System Additions/Modifications – Upgrading the electrical system to meet EPA Class 1 reliability to avoid common mode failures and upgrades to equipment and systems to meet requirements of NFPA 820 are anticipated. No upgrades to the existing standby generators or standby capacity are included. Increasing the number of circuits to the SCADA Room in the Administration Building is anticipated.
- Electrical Building Expansion – An expansion to the existing electrical building approximately 30-feet by 40-feet to house new electrical equipment is anticipated. The construction of the building expansion is anticipated to match the building being expanded.
- Instrumentation and Control System Additions/Modifications – Upgrading the existing PLCs with new PLCs in their current locations and upgrading the SCADA servers with new units including OS and HMI software upgrades are anticipated.
- Class I Injection Well Facilities – The new well, wellhead facility, injection pump system, and associated equipment shall be provided by others. Piping and electrical conduit up to the well site shall be included in this project. Coordination with City staff and their project teams shall be required as part of this project in order to locate and size the piping and conduits.
- Class V ASR Well Facilities Additions – The new wells, wellhead facilities, an injection/withdrawal pump system, and associated equipment and piping shall be provided by others. Piping and electrical conduit shall be included in this project. Piping and electrical conduit up to the well sites shall be included in this project. Coordination with City staff and their project teams shall be required as part of this project in order to locate and size the piping and conduits.

The facility expansion shall include additional modifications relating to existing plant processes which have been identified as needing improvements. The process improvements proposed to be included as part of the plant expansion include the following:

- Rehabilitation of Sand Filter A – Replacement of the filter media and minor repairs to the filter are anticipated.

In addition to structural, process mechanical, and electrical/I&C design, architectural, plumbing, and HVAC design services are anticipated for the proposed chlorine building and architectural and HVAC services are anticipated for the proposed electrical building expansion.

Under this authorization the Engineer shall assist the City through the following services:

TASK 1. PROJECT ADMINISTRATION SERVICES (PART 1 and 2)

Engineer shall perform the following specific tasks for Parts 1 and 2 of the project.

Task 1.1 – Kick-Off Meeting (Parts 1 and 2)

Engineer shall 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. The kick-off meeting shall address Parts 1 and 2 of the project.

Task 1.2 – Progress Meetings (Parts 1 and 2)

Engineer shall prepare for and attend progress meetings shall be held monthly with the City to review progress of the project and project schedule. The Engineer shall prepare and submit meeting summaries within 5 business days of the progress meetings, as necessary. It is assumed that Progress meetings for Parts 1 and 2 shall be held at the same time whenever possible. Up to 24 progress meetings are anticipated during the design phases of Parts 1 and 2 in addition to the design review meetings and other workshops listed below.

Task 1.3 – General Project Administration (Parts 1, and 2)

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

PART 1 – PROCESS IMPROVEMENTS

TASK 2. PRELIMINARY ENGINEERING SERVICES (PART 1)

Engineer shall perform preliminary engineering services for the Westport WWTF Expansion Process Improvements. The survey services included within this scope of services shall address improvement/expansion activities for the Westport WWTF Expansion Part 1 - Process Improvements and Part 2 – Facility Upgrade.

Task 2.1 – Site Visits for Westport WWTF Expansion Part 1 - Process Improvements

Engineer shall perform two (2) site visits and coordinate with the City’s engineering and operational staff as well as key design team members to facilitate obtaining the technical information necessary to support preliminary design.

Task 2.2 – Survey Services for Westport WWTF Expansion Part 1 - Process Improvements

Engineer shall coordinate the activities of surveyor to provide a topographical survey of the project area and obtain process and facility hydraulic elevations. The establishment of process and hydraulic elevations are included. More specific services for this task are included in the Professional Surveying and Mapping Services table below.

Professional Surveying and Mapping Services Scope of Services
<u>Part 1 – Process Improvements and Part 2 – Facility Expansion</u>
<p>Provide a Topographic Survey in accordance with 5J-17 F.A.C.</p> <ul style="list-style-type: none"> ➤ Establish the location of all boundary and right of way lines within the project area. ➤ Sufficient spot elevations will be collected to create one foot contours. Improvements within the project area that may affect design will be located, including but not limited to, structures, buildings, trees, pavement, and fences. ➤ Establish approximately thirty-five (35) process and hydraulic elevations to support the design. ➤ All utilities above and below ground identified, as field located by the utility companies’ representatives and during SUE excavations, will be identified as to type and size and will be located horizontally.
The horizontal values for this project will be referenced to the Florida State Plane Coordinate System (South Zone), North American Datum Of 1983 (latest adjustment). Vertical values will be referenced to the North American Vertical Datum of 1988. A minimum of two (2) site benchmarks will be established in the survey area.
REPORTING
<p>A survey drawing in AutoCAD format showing data obtained will be prepared. Drawing will include spot elevations at the X, Y, and Z coordinates.</p> <p>Four (4) sets of drawings signed and sealed by a licensed Professional Survey and Mapper in the State of Florida will be provided to the City.</p>

Engineer shall review the survey data collected for completeness and accuracy in supporting the final design.

Task 2.3 – Geotechnical Investigation Services for Westport WWTF Expansion Part 1 - Process Improvements

Engineer shall coordinate the activities of the geotechnical engineer to provide field geotechnical work and a geotechnical report with foundation and dewatering recommendations. The work includes borings for the clarifier splitter box and borings for a CCC structure modification. More specific services for this task are included in the scope of services set forth in the Geotechnical Engineering Services Scope of Services table below.

Geotechnical Engineering Services Scope of Services
<u>Phase I – Process Improvements</u>
<p>Drill and sample a total of four (4) Standard Penetration Test (SPT) borings; two (2) to a depth of approximately 25 feet below grade for the chlorine contact chamber modifications/expansions and two (2) to a depth of approximately 20 feet below grade for a proposed flow splitting chamber.</p>
<p>The SPT borings will be performed with a truck mounted rig using rotary drilling procedures. Samples of the in-place materials will be recovered with a standard split barrel sample spoon</p>

driven with a 140-pound hammer falling 30 inches (the Standard Penetration Test in accordance with ASTM D1586).

Underground utility clearance will be required prior to commencing the drilling of the borings. Therefore, the Geotechnical Engineer will contact “Sunshine One-Call” Service to obtain underground public utility clearance. The underground utility clearance outside of the public domain shall be the responsibility of the property owner or manager and coordinated with the Geotechnical Engineer.

ENGINEERING/REPORTING

A geotechnical engineer will review the soil samples and representative samples will be tested for physical properties such as gradation, moisture content and organic content, if deemed necessary. The results of the field exploration and laboratory test results will be the basis for our geotechnical engineering recommendations for foundation design/related construction. The results of our work will be transmitted in 2 hard copy and one electronic copy report which will specifically contain information listed below:

1. A plan of the site showing the SPT boring locations.
2. Logs of the exploratory borings, which furnish the results of the SPT sampling.
3. Discussion of foundation systems which lend themselves to the site conditions and proposed construction.
4. Recommendations for shallow and/or deep foundation systems.
5. Allowable soil/rock bearing capacity and/or pile capacities.
6. Estimation of foundation settlements.
7. Requirements for site preparation.
8. An anticipation of groundwater levels and methods for handling groundwater during construction.

Engineer shall review the geotechnical data collected for completeness and accuracy in supporting the final design.

Task 2.4 - Conduct Subsurface Utility Exploration (SUE) Services for Westport WWTF Expansion Part 1 - Process Improvements

Engineer shall coordinate the activities of the SUE field investigations to provide existing utility information for the project area. Four (4) excavations are included. More specific services for this task are included in the Subsurface Utility Excavation Services below.

Subsurface Utility Excavation (SUE) Services Scope of Services

Part 1 – Process Improvements

Perform up to four (4) subsurface utility excavations (SUEs) for location and confirmation of existing underground utilities on site.

REPORTING

Field location mapping notes will be prepared for inclusion of data into the topographic survey drawings.

Engineer shall review SUE data collected for completeness and accuracy in supporting the final design.

Task 2.5 - Perform NFPA 820 Mitigation Study for Westport WWTF Expansion Part 1 - Process Improvements and Part 2 – Facility Expansion

- Engineer shall survey the Westport WWTF electrical facilities to determine the extent that the existing facilities are not in compliance with NFPA 820. A draft and final technical memorandum shall be provided to the City with the results of the survey and estimated costs to bring the existing electrical system into compliance with NFPA 820. A review meeting with the City shall be held after the draft document is submitted to the City for review.

Task 2.6 – Prepare 30% Design Drawings

Engineer shall:

- Prepare 30 percent design drawings addressing:
 1. Preliminary design of clarifier splitter box.
 2. Preliminary design of plant drain system improvements.
 3. Preliminary design of CCC overflow modifications.
 4. Preliminary design of in-plant reuse system modifications.

Draft and final 30 percent drawings shall be provided to the City with a workshop /review meeting with PSL staff after the draft document is submitted to the City.

TASK 3. PERMITTING (PART 1)

Task 3.1 – Engineering Services for Permitting the Westport WWTF Expansion Part 1 - Process Improvements

Prepare and Submit FDEP Permit Revision Application Package

The Engineer shall:

- Communicate with FDEP on the Domestic Wastewater Permit requirements (minor revision) and sufficiency of the permit application and supporting documents. Engineer shall coordinate, prepare for and attend a pre-application meeting with the FDEP staff to facilitate the processing of this permit modification.
- Prepare the FDEP Domestic Wastewater Permit (minor revision) application for the Westport WWTF Expansion Part 1 - Process Improvements. In addition to the application, Engineer shall prepare and submit supporting documents with the application as needed by FDEP. These documents shall include design drawings and specifications to support the Westport WWTF Expansion Part 1 - Process Improvements. A draft permit revision application shall be submitted to the City for review and approval prior to submitting the final application package.
- Prepare a response to a Request for Additional Information (RAI) 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 Expansion. The permit revision application shall 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).

Task 3.2 - Allowance for Permit Application Fees – This task is an allowance for the City related to costs associated with the permitting application requirements for the Westport WWTF Expansion Part 1 – Process Improvements.

TASK 4. FINAL DESIGN (PART 1)

Engineer shall provide final design documents for the Westport WWTF Expansion Part 1 - Process Improvements that consist of drawings and specifications as approved by the City and consistent with the construction permit. For the purpose of preparing the budget for this authorization, certain assumptions have been made as described below. Based on these assumptions, it has been estimated that approximately 54 design drawings shall be required for the construction contract. The following specific tasks shall be performed:

Task 4.1 – Prepare Final Design Documents for the Westport WWTF Expansion Part 1 - Process Improvements

The Westport WWTF Expansion Part 1 - Process Improvements design documents shall include generally the drawings shown on the preliminary drawing list below.

Part 1 – Process Improvements Preliminary Drawing List

SHT. NO	DWG. NO.	TITLE
GENERAL		
1	G-01	Title Sheet
2	G-02	List of Drawings
3	G-03	List of Drawings
4	G-04	General Notes
5	G-05	Flow Diagram
6	G-06	Hydraulic Profile
CIVIL		
7	C-01	Existing Site Plan
8	C-02	Proposed Site Plan
9	C-03	Existing Yard Piping
10	C-04	Partial Yard Piping Plan 1
11	C-05	Partial Yard Piping Plan 2
12	C-06	Partial Yard Piping Plan 3
13	C-07	Partial Yard Piping Plan 4
14	C-08	Paving & Drainage Plan
15	C-09	Geometry Plan
16	C-10	Civil Details
17	C-11	Civil Details
STRUCTURAL		
18	S-01	General Structural Notes, Abbreviations, Symbols, and Key Plan

SHT. NO	DWG. NO.	TITLE
19	S-02	Clarifier Splitter Box Plans, Sections, and Details
20	S-03	In-Plant Pump Station Plans, Sections, and Details
21	S-04	Chlorine Contact Chamber Modifications Details
22	S-05	Structural Details
PROCESS MECHANICAL		
23	PM-01	Clarifier Splitter Box Piping Plan
24	PM-02	Clarifier Splitter Box Section and Details
25	PM-03	Aeration Basin Piping Modification Plan
26	PM-04	Aeration Basin Piping Modification Section and Details
27	PM-05	Pre-Treatment Structure Piping Modification
28	PM-06	Dewatering System Piping Modifications
29	PM-07	Filter Piping Modifications
30	PM-08	Chlorine Contact Chamber Piping Modifications
31	PM-09	In-Plant Reuse System Piping Modifications
32	PM-10	Clarifier RAS Piping Modifications
33	PM-11	Details
34	PM-12	In-Plant Drain Pump Station Plans
35	PM-13	In-Plant Drain Pump Station Sections and Details
36	PM-14	Details
37	PM-15	Details
ELECTRICAL		
38	E-1	Symbols, Notes and Abbreviations
39	E-2	Electrical Site Plan
40	E-3	MCC Single Line Diagram (PS1)
41	E-4	MCC Single Line Diagram (PS2)
42	E-5	MCC Single Line Diagram (PS3)
43	E-6	Elementary Diagrams - Sheet 1
44	E-7	Elementary Diagrams - Sheet 2
45	E-8	Pump Station No. 1 – Power, Lighting and Grounding Plan
46	E-9	Pump Station No. 2 – Power, Lighting and Grounding Plan
47	E-10	Pump Station No. 3 – Power, Lighting and Grounding Plan
48	E-11	Electrical Details
INSTRUMENTATION AND CONTROL		
49	I-1	Symbols Notes and Abbreviations
50	I-2	SCADA Block Diagram
51	I-3	P&ID - Sheet 1
52	I-4	P&ID - Sheet 2
53	I-5	P&ID - Sheet 3
54	I-6	Instrumentation Details

Tasks to be performed are as follows:

Collect Data and Attend Site Visits/Pre-Design Site Visit

Engineer shall perform two (2) site visits and coordinate with the City’s engineering and operational staff as well as key design team members to facilitate obtaining the technical information necessary to support final design.

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

Engineer shall:

- Prepare general drawings to a 60 percent completion level.
- Prepare civil drawings that include site plans/geometry and drainage system/in-plant pump station facilities 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 structural drawings for the clarifier flow splitter structure and in-plant pump station(s) to a 60 percent completion level.
- Prepare mechanical process drawings for the in-plant pump station facilities to a 60 percent completion level.
- Prepare electrical drawings including a site electrical plan, a power and control plan, a lighting plan, lightning protection plans, single line diagrams, panel schedules, light fixture schedules, conduit schedules, and details to a 60 percent completion level.
- Prepare instrumentation drawings for the in-plant pump stations to a 60 percent completion level.
- Prepare a draft 60 percent set of Technical Specifications (Project Manual).
- Assemble and submit contract documents to the City for review.
- 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

Engineer shall:

- 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, conduit 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 draft 90 percent set of Technical Specifications (Project Manual) based on the City'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 PSL Building Department) for review.
- Conduct a 90 percent design review meeting with the City to discuss comments.

Prepare final design documents to a 100 percent completion level

Engineer shall:

- Update and prepare general, civil drawings, structural drawings, mechanical process 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).
- Assemble and submit contract documents to the City.

Prepare Bid Form and Review Bid Documents

- Prepare a bid form for Part 1 – Process Improvements and review the final bid documents prepared by the City.

Task 4.2 – Preliminary Opinion of Probable Cost

Engineer shall prepare a preliminary opinion of probable construction cost at the 60 percent and 90 percent design levels and for the approved 100 percent drawings and technical specifications (final contract documents) for the Westport WWTF Expansion Part 1 - Process Improvements.

TASK 5. BIDDING SERVICES (PART 1)

Engineer shall provide services during the bidding phase of the Westport WWTF Expansion Part 1- Process Improvements.

Task 5.1 –Bidding Services

Engineer shall perform the following tasks:

- ***Pre-advertise Meeting*** – Engineer shall attend one pre-advertise meeting with the City's Purchasing Division to assist in preparing the project for bid. The Engineer shall prepare and submit meeting summary within 5 business days of progress meeting.
- ***Pre-bid Conference*** – Engineer shall attend one pre-bid conference at a location selected by the City. Engineer's representative shall answer contractor questions as applicable and take meeting notes.
- ***Question Response/Addenda Preparation*** – Engineer shall assist the City in their preparation of responses to contractor questions, fielded by the City's Purchasing Division, in consultation with the City's Project Manager.
- ***Bid Opening and Evaluation*** – Engineer at the City's request may provide assistance in reviewing bid proposals.

TASK 6. CONSTRUCTION PHASE SERVICES (PART 1)

Engineer shall provide services during the construction phase. The duration of construction phase services is based on approximate 6-month construction contract for the Westport WWTF Expansion Part 1 - Process Improvements. Engineer shall perform the following tasks to assist the City during construction of Westport WWTF Expansion Part 1 – Process Improvements to ensure that the project was completed in general conformance with the approved construction documents:

Task 6.1 – Assist the City in Construction Phase Services

Engineer shall perform the following:

- **Construction Administration** – The Engineer shall administer the project in conformance with the Construction Contract and its General Conditions. The Engineer shall coordinate with the Contractor and the City during construction.
- **Conform Contract Documents** - Conform the contract documents prior to construction. A conformed set of documents with all addendum information incorporated shall be provided.
- **Preconstruction Conference** – Prepare Agenda and attend the City’s preconstruction conference with the Contractor. The Engineer shall prepare and submit a 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 75 submittals are anticipated.
- **RFI Responses** – Review and respond to requests for information (RFI) from the Contractor. Up to 50 RFIs are anticipated.
- **Pay Request Review** – Review, recommend and submit to the City for payment the monthly pay request from the Contractor.
- **Site Visits** – Make six (6) periodic site visits 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 Expansion. These site visits shall coincide with the monthly progress meetings in Task 1. Two (2) additional site visits are included for establishment of substantial and final completion for Part 1 of the project.
- **Record Drawings** – Prepare record drawings by transcribing information provided by the Contractor. REI shall 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, City 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 shall include finish floor elevations, tank elevations, pump centerline elevations and yard piping locations/elevations.
- **Certificate of Completion** – Engineer shall prepare FDEP certificate of completion of construction and submit to FDEP for approval.
- **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 Expansion – Part 1 Process Modifications. O&M manuals shall include a master list of spare parts. In addition, original warranties shall 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.
- **Materials and Density Testing Services** – Coordinate with Contractor’s materials and density testing sub-contractor during construction. It is anticipated that testing shall be as follows:
 1. Density testing for compaction related to yard piping and beneath structures.
 2. Slump testing of concrete each delivery and compression testing five cylinders every 50 C.Y. minimum.

TASK 7. RESIDENT PROJECT REPRESENTATIVE (PART 1)

Engineer shall provide resident construction inspector services during the construction phase of the Project to assist the City in observing the progress and quality of the Work.

Engineer shall perform the following:

- **General** – Through RPR's observations of the Contractor's Work, Engineer shall endeavor to provide further protection for the City against defects and deficiencies in the Work. However, Engineer shall not as a result of such observations of the Contractor's Work, supervise, direct, or have control over the Work, nor shall Engineer (including the RPR) have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by any contractor, or the safety precautions and programs incident to the Work or any contractor's work in progress, for security or safety at the Site, nor for any failure of a contractor to comply with Laws and Regulations applicable to such contractor's performing and furnishing of its work. The Engineer (including RPR) neither guarantees the performance of any contractor nor assumes responsibility for Contractor's failure to furnish and perform the Work in accordance with the Contract Documents.
- **Construction Progress Meetings** – Engineer (specifically resident project representative and project manager) shall conduct monthly progress meetings with the Contractor and the City. The Engineer shall prepare and submit meeting summaries within 5 business days of progress meetings.
- **Site Inspection**- Engineer shall perform part-time (1 person for 24 hours per week) Resident Project Representative (RPR) as needed for a maximum of 22 weeks for the Westport WWTF Expansion Part 1 – Process Improvements 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.

PART 2 – FACILITY EXPANSION

TASK 8. PROVIDE PRELIMINARY ENGINEERING SERVICES (PART 2)

Engineer shall perform preliminary engineering services for the Westport WWTF Expansion Part 2 – Facility Expansion. The geotechnical and SUE services included within this scope of services shall only address improvement activities for the Westport WWTF Expansion Part 2 – Facility Expansion.

Task 8.1 - Conduct Geotechnical Investigation Services for Westport WWTF Expansion Part 2 - Facility Expansion

Engineer shall 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:

- Borings for the proposed aeration basins
- Borings for the proposed clarifier
- Borings for the proposed chlorine building

More specific services for this task are included in the scope of services set forth in the Geotechnical Engineering Services Scope of Services table below.

Geotechnical Engineering Services Scope of Services
<i>Phase II – Facility Expansion</i>
<p>Drill and sample a total of thirteen (13) Standard Penetration Test (SPT) borings to a depth of approximately 30 feet below grade. The borings will be located as follows:</p> <ul style="list-style-type: none"> ➤ 8 borings to a depth of 30 feet for the proposed process basins 4, 5 and 6; ➤ 3 borings to a depth of 30 feet for the proposed clarifier no. 4 ➤ 2 borings to a depth of 30 feet for the proposed chlorine building no. 2
<p>The SPT borings will be performed with a truck mounted rig using rotary drilling procedures. Samples of the in-place materials will be recovered with a standard split barrel sample spoon driven with a 140-pound hammer falling 30 inches (the Standard Penetration Test in accordance with ASTM D1586).</p>
<p>Underground utility clearance will be required prior to commencing the drilling of the borings. Therefore, the Geotechnical Engineer will contact “Sunshine One-Call” Service to obtain underground public utility clearance. The underground utility clearance outside of the public domain shall be the responsibility of the property owner or manager and coordinated with the Geotechnical Engineer.</p>
ENGINEERING/REPORTING
<p>A geotechnical engineer will review the soil samples and representative samples will be tested for physical properties such as gradation, moisture content and organic content, if deemed necessary. The results of the field exploration and laboratory test results will be the basis for our geotechnical engineering recommendations for foundation design/related construction. The results of our work will be transmitted in two (2) hard copies signed and sealed by a Florida registered Professional Engineer and one (1) electronic copy report which will specifically contain information listed below:</p> <ol style="list-style-type: none"> 1. A plan of the site showing the SPT boring locations. 2. Logs of the exploratory borings, which furnish the results of the SPT sampling. 3. Discussion of foundation systems which lend themselves to the site conditions and proposed construction. 4. Recommendations for shallow and/or deep foundation systems. 5. Allowable soil/rock bearing capacity and/or pile capacities. 6. Estimation of foundation settlements. 7. Requirements for site preparation. 8. An anticipation of groundwater levels and methods for handling groundwater during construction.

Engineer shall review the geotechnical data collected for completeness and accuracy in supporting the final design.

Task 8.2- Conduct Subsurface Utility Exploration (SUE) Services for Westport WWTF Expansion Part 2 - Facility Expansion

Engineer shall coordinate the activities of the SUE field investigations to provide exiting utility information for the project area. More specific services for this task are included in the SUE Services table below.

Subsurface Utility Excavation (SUE) Services Scope of Services
<i>Part 2 – Facility Upgrades</i>
Perform up to ten (10) subsurface utility excavations (SUEs) for location and confirmation of existing underground utilities on site.
REPORTING
Field location mapping notes will be prepared for inclusion of data into the topographic survey drawings.

Engineer shall review SUE data collected for completeness and accuracy in supporting the final design.

Task 8.3 - Conduct Preliminary Evaluation Services for the Westport WWTF Expansion Part 2 – Facility Expansion

The Engineer shall:

- Perform initial and follow up site visits 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.
- Develop the Basis of Design for the plant expansion. The BOD document shall use the City-provided 10.71 MGD (ADF) flow and shall establish the biological loadings, effluent water quality standards and system reliability requirements that shall be used to size unit process improvements. The BOD document shall review treatment alternatives that shall include as a minimum, influent flow equalization and peak flow biological treatment via Aeration Basin Sizing. The treatment alternatives shall be evaluated using the BioWin Process evaluation program. The plant existing influent data and process data collected as part of a sampling plan shall be used to develop the process model. A draft and final Basis of Design document shall be provided to the City with two (2) workshops with PSL staff during the Basis of Design document preparation and a workshop/review meeting with PSL staff after the draft document is submitted to the City.
- Develop an effluent disposal protocol for the plant expansion. The effluent disposal protocol document shall establish up to five (5) operational scenarios for the effluent pump system, the effluent holding ponds, the existing and new injection well, the new ASR well, and the existing percolation ponds. A draft and final effluent disposal protocol document shall be provided to the City with two (2) workshops with the City’s staff during the document preparation and a workshop/review meeting with the City’s staff after the draft document is submitted to the City. The workshops are anticipated to be held in conjunction with the Basis of Design workshops.
- 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 shall be provided to the City with a workshop /review meeting with PSL staff after the draft document is submitted to the City.

TASK 9 PERMITTING (PART 2)

Pursuant to the Contract, the Engineer shall perform permitting services for the Westport WWTF Expansion Part 2 – Facility Expansion.

Task 9.1 – Engineering Services for Permitting the Westport WWTF Expansion Part 2 – Facility Expansion

Prepare and Submit FDEP Domestic Wastewater Permit Application Package

The Engineer shall:

- Communicate with FDEP on the Domestic Wastewater Permit (significant revision) requirements and sufficiency of the permit application and supporting documents. Engineer shall coordinate, prepare for and attend a pre-application meeting with the FDEP staff to facilitate the processing of this permit modification.
- Prepare the FDEP Domestic Wastewater Permit (significant revision) application for the Westport WWTF Expansion Part 2 – Facility Expansion. In addition to the application, Engineer shall prepare and submit supporting documents to the application as needed by FDEP. These documents shall include a detailed revised Preliminary Design Report (PDR), which includes introduction, regulatory design requirements, basis of design of treatment facilities, and associated drawings and figures to support the Westport WWTF Expansion Part 2 – Facility Expansion.
- 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 Expansion. The permit revision application shall 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).

Task 9.2 - Allowance for Permit Application Fees – This task is an allowance for the City related to costs associated with the permitting application requirements for the Westport WWTF Expansion – Part 2 Facility Expansion.

TASK 10. FINAL DESIGN (PART 2)

Pursuant to the Contract, Engineer shall provide final design documents for the Westport WWTF Expansion 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. For the purpose of preparing the budget for this authorization, certain assumptions have been made as described below. Based on these assumptions, it has been estimated that approximately 240 design drawings shall be required for the construction contract. The following specific tasks shall be performed:

Task 10.1 – Prepare Final Design Documents for the Westport WWTF Expansion Part 2 – Facility Expansion

The Westport WWTF Expansion Part 2 – Facility Expansion design documents shall include generally the drawings shown on the preliminary drawing list below.

Part 2 – Facility Expansion Preliminary Drawing List

SHT. NO	DWG. NO.	TITLE
GENERAL		
1	G-01	Title Sheet
2	G-02	Location Maps
3	G-03	List of Drawings
4	G-04	List of Drawings
5	G-05	Legends
6	G-06	General Notes
7	G-07	Flow Diagram
8	G-08	Hydraulic Profile
CIVIL		
9	C-01	Existing Site Plan
10	C-02	Proposed Site Plan
11	C-03	Existing Yard Piping
12	C-04	Yard Piping Plan Key
13	C-05	Partial Yard Piping Plan 1
14	C-06	Partial Yard Piping Plan 2
15	C-07	Partial Yard Piping Plan 3
16	C-09	Geometry Plan
17	C-10	Paving Grading & Drainage Plan
18	C-11	Lined Effluent Pond Details
19	C-12	Civil Details
20	C-13	Civil Details
ARCHITECTURAL		
21	A-01	Chlorine Building Code Summary Sheet and Life Safety Plan
22	A-02	Chlorine Building Floor Plan and Roof Plan
23	A-03	Chlorine Building Elevations
24	A-04	Electrical Building Expansion Code Summary Sheet and Life Safety Plan
25	A-05	Electrical Building Expansion Floor Plan and Roof Plan
26	A-06	Electrical Building Expansion Elevations
27	A-07	Wall Sections
28	A-08	Schedules
29	A-09	Details
STRUCTURAL		

Design Services for the Westport Wastewater Treatment Facility Expansion

SHT. NO	DWG. NO.	TITLE
30	S-01	Pre-Treatment Structure Modifications
31	S-02	Aeration Basin Foundation Plan
32	S-03	Aeration Basin Top of Structure Plan
33	S-04	Aeration Basin Sections
34	S-05	Aeration Basin Details
35	S-06	Clarifier Plan
36	S-07	Clarifier Section and Details
37	S-08	Chlorine Building Foundation Plan
38	S-09	Chlorine Building Roof Plan
39	S-10	Chlorine Building Sections
40	S-11	Chlorine Building Details and Schedules
41	S-12	Electrical Building Expansion Foundation Plan
42	S-13	Electrical Building Expansion Roof Plan
43	S-14	Electrical Building Expansion Elevations
44	S-15	Electrical Building Expansion Sections and Details
45	S-16	Electrical Building Expansion Schedules
46	S-17	Miscellaneous Slabs
47	S-18	Pipe Supports
48	S-19	Structural Details
49	S-20	Structural Details
PROCESS MECHANICAL		
50	PM-01	Pretreatment Mechanical Lower Plan
51	PM-02	Pretreatment Mechanical Upper Plan
52	PM-03	Pretreatment Mechanical Sections
53	PM-04	Pretreatment Mechanical Sections
54	PM-05	Anoxic/Aeration Basin #4 & 6 Mechanical Plan and Details
55	PM-06	Anoxic/Aeration Basin #5 Mechanical Plan and Details
56	PM-07	Anoxic/Aeration Basin Mechanical Sections and Details
57	PM-08	Anoxic/Aeration Basin #4 & 6 Mechanical Sections
58	PM-09	Anoxic/Aeration Basin #5 Mechanical Section
59	PM-10	Anoxic/Aeration Basin End Mechanical Plan
60	PM-11	Anoxic/Aeration Basin Mechanical End Plan Details & Sections
61	PM-12	Anoxic Basins #4, 5 & 6 Covers & Odor Control Plan
62	PM-13	Anoxic Basins & Odor Control Elevation & Details
63	PM-14	Clarifier #4 Mechanical Plan
64	PM-15	Clarifier #4 Mechanical Plan, Sections & Details
65	PM-16	Clarifier #4 Details
66	PM-17	RAS/WAS Pump Station Plan
67	PM-18	RAS/WAS Pump Station Pump Plan & Sections
68	PM-19	RAS/WAS Pump Station Mechanical Section and Details
69	PM-20	Filter Dosing Pump Station Mechanical Plan
70	PM-21	Filter Dosing Pump Station Mechanical Sections
71	PM-22	Flow Equalization Tank Demolition Plan and Elevation
72	PM-23	Reclaimed Water Pump No. 6 Plan
73	PM-24	Reclaimed Water Pump No. 6 Profile and Details
74	PM-25	Chlorine Building #2 Mechanical Plan
75	PM-26	Chlorine Building #2 Mechanical Details
76	PM-27	Chlorine Building #2 Mechanical Details
77	PM-28	Mechanical Details

Design Services for the Westport Wastewater Treatment Facility Expansion

SHT. NO	DWG. NO.	TITLE
78	PM-29	Mechanical Details
ELECTRICAL		
79	E-1	Symbols, Notes and Abbreviations
80	E-2	Electrical Site Plan
81	E-3	Electrical Site Plan A
82	E-4	Electrical Site Plan B
83	E-5	Main Switchgear Single Line Diagram
84	E-6	Main Switchgear Single Line Diagram (continued)
85	E-7	Standby Power Single Line Diagram
86	E-8	MCC-1001 Single Line Diagram - Sheet 1
87	E-9	MCC-1001 Single Line Diagram - Sheet 2
88	E-10	MCC-1001 Single Line Diagram- Sheet 3
89	E-11	MCC-1002 Single Line Diagram - Sheet 1
90	E-12	MCC-1002 Single Line Diagram - Sheet 2
91	E-13	MCC-1003 Single Line Diagram - Sheet 1
92	E-14	MCC-1003 Single Line Diagram - Sheet 2
93	E-15	MCC-2001 Single Line Diagram - Sheet 1
94	E-16	MCC-2001 Single Line Diagram - Sheet 2
95	E-17	MCC-2002 Single Line Diagram - Sheet 1
96	E-18	MCC-2002 Single Line Diagram - Sheet 2
97	E-19	MCC-2002 Single Line Diagram- Sheet 3
98	E-20	MCC-2003 Single Line Diagram - Sheet 1
99	E-21	MCC-2003 Single Line Diagram - Sheet 2
100	E-22	MCC-9001 Single Line Diagram - Sheet 1
111	E-23	MCC-9001 Single Line Diagram - Sheet 2
112	E-24	MCC-9002 Single Line Diagram - Sheet 1
113	E-25	MCC-9002 Single Line Diagram - Sheet 2
114	E-26	Main Switchgear Existing and Proposed Front View
115	E-27	Standby Switchgear Existing and Proposed Front View
116	E-28	MCC-1001 Existing and Proposed Front View
117	E-29	MCC-1002 Existing and Proposed Front View
118	E-30	MCC-1003 Existing and Proposed Front View
119	E-31	MCC-2001 Existing and Proposed Front View
120	E-32	MCC-2002 Existing and Proposed Front View
121	E-33	MCC-2003 Existing and Proposed Front View
122	E-34	MCC-9001 Existing and Proposed Front View
123	E-35	MCC-9002 Existing and Proposed Front View
124	E-36	Elementary Diagrams - Sheet 1
125	E-37	Elementary Diagrams - Sheet 2
126	E-38	Elementary Diagrams - Sheet 3
127	E-39	Elementary Diagrams - Sheet 4
128	E-40	Elementary Diagrams - Sheet 5
129	E-41	Elementary Diagrams - Sheet 6
130	E-42	Elementary Diagrams - Sheet 7
131	E-43	Elementary Diagrams - Sheet 8
132	E-44	Interconnect Diagrams – Sheet 1
133	E-45	Interconnect Diagrams – Sheet 2
134	E-46	Interconnect Diagrams – Sheet 3
135	E-47	Interconnect Diagrams – Sheet 4

Design Services for the Westport Wastewater Treatment Facility Expansion

SHT. NO	DWG. NO.	TITLE
136	E-48	Interconnect Diagrams – Sheet 5
137	E-49	MCC/Generator Building No. 1 – Existing Demo Plan
138	E-50	MCC/Generator Building No. 1 – Power Plan
139	E-51	MCC/Generator Building No. 1 – Lighting Plan
140	E-52	MCC/Generator Building No. 1 – Grounding Plan
141	E-53	MCC/Generator Building No. 2 – Existing Demo Plan
142	E-54	MCC/Generator Building No. 2 – Power Plan
143	E-55	MCC/Generator Building No. 2 – Lighting Plan
144	E-56	MCC/Generator Building No. 2 – Grounding Plan
145	E-57	Electrical Building 3 – Power Plan
146	E-58	Electrical Building 3 – Lighting Plan
147	E-59	Electrical Building 3 – Grounding Plan
148	E-60	Anoxic Basin No. 5 – Power Plan
149	E-61	Anoxic Basin No. 5 – Lighting and Grounding Plan
150	E-62	Anoxic Basin No. 4 and 6 – Power Plan
151	E-63	Anoxic Basin No. 4 and 6 – Lighting and Grounding Plan
152	E-64	Aeration Basin No. 5 – Power Plan
153	E-65	Aeration Basin No. 5 – Lighting and Grounding Plan
154	E-66	Aeration Basin No. 4 and 6 – Power Plan
155	E-67	Aeration Basin No. 4 and 6 – Lighting and Grounding Plan
156	E-68	Clarifier No. 3 – Power, Lighting and Grounding Plan
157	E-69	Clarifier No. 4 – Power, Lighting and Grounding Plan
158	E-70	RAS/WAS – Power Plan
159	E-71	RAS/WAS – Lighting and Grounding Plan
160	E-72	Reclaimed Water System CCT No. 3 and 4 – Power Plan
161	E-73	Reclaimed Water System CCT No. 3 and 4 – Lighting and Grounding Plan
162	E-74	Filter Dosing and Injection Well No. 1 – Power Plan
163	E-75	Filter Dosing and Injection Well No. 1 – Lighting and Grounding Plan
164	E-76	Chlorine Building No. 2 – Power Plan
165	E-77	Chlorine Building No. 2 – Lighting and Grounding Plan
166	E-78	Flow EQ Tank No. 1 – Existing Demo Plan
167	E-79	Chlorine Building No. 1 – Power Plan
168	E-80	Admin Building – Plan, Risers and Details
169	E-81	NFPA 820 Mitigation Plans - Sheet 1
170	E-82	NFPA 820 Mitigation Plans - Sheet 2
171	E-83	NFPA 820 Mitigation Plans - Sheet 3
172	E-84	NFPA 820 Mitigation Plans - Sheet 4
173	E-85	NFPA 820 Mitigation Plans - Sheet 5
174	E-86	Panel Schedules – Sheet 1
175	E-87	Panel Schedules – Sheet 2
176	E-88	Panel Schedules – Sheet 3
177	E-89	Lighting Fixture Schedule
178	E-90	Lighting Details - Sheet 1
179	E-91	Lighting Details - Sheet 2
180	E-92	Electrical Details – Sheet 1
181	E-93	Electrical Details – Sheet 2
182	E-94	Electrical Details – Sheet 3

Design Services for the Westport Wastewater Treatment Facility Expansion

SHT. NO	DWG. NO.	TITLE
HVAC		
183	HV-01	Symbols Notes and Abbreviations
184	HV-02	Chlorine Building No. 2 Plan
185	HV-03	Electrical Building 3 Plan
186	HV-04	Schedules and Details
187	HV-05	HVAC Details
PLUMBING		
188	P-01	Symbols Notes and Abbreviations
189	P-02	Chlorine Building No. 2 Plan and Riser
190	P-03	Schedules and Details
INSTRUMENTATION		
191	I-1	Symbols Notes and Abbreviations
192	I-2	SCADA Block Diagram - Sheet 1
193	I-3	SCADA Block Diagram - Sheet 2
194	I-4	SCADA Block Diagram - Sheet 3
195	I-5	SCADA Block Diagram - Sheet 4
196	I-6	SCADA Block Diagram - Sheet 5
197	I-7	SCADA Block Diagram - Sheet 6
198	I-8	SCADA Block Diagram - Sheet 7
199	I-9	SCADA Block Diagram - Sheet 8
200	I-10	P&ID - Sheet 1
201	I-11	P&ID - Sheet 2
202	I-12	P&ID - Sheet 3
203	I-13	P&ID - Sheet 4
204	I-14	P&ID - Sheet 5
205	I-15	P&ID - Sheet 6
206	I-16	P&ID - Sheet 7
207	I-17	P&ID - Sheet 8
208	I-18	P&ID - Sheet 9
209	I-19	P&ID - Sheet 10
210	I-20	P&ID - Sheet 11
211	I-21	P&ID - Sheet 12
212	I-22	P&ID - Sheet 13
213	I-23	P&ID - Sheet 14
214	I-24	P&ID - Sheet 15
215	I-25	P&ID - Sheet 16
216	I-26	P&ID - Sheet 17
217	I-27	P&ID - Sheet 18
218	I-28	P&ID - Sheet 19
219	I-29	P&ID - Sheet 20
220	I-30	P&ID - Sheet 21
221	I-31	P&ID - Sheet 22
222	I-32	P&ID - Sheet 23
223	I-33	P&ID - Sheet 24
224	I-34	P&ID - Sheet 25
225	I-35	P&ID - Sheet 26
226	I-36	P&ID - Sheet 27
227	I-37	P&ID - Sheet 28
228	I-38	P&ID - Sheet 29

SHT. NO	DWG. NO.	TITLE
229	I-39	P&ID - Sheet 30
230	I-40	P&ID - Sheet 31
231	I-41	P&ID - Sheet 32
232	I-42	P&ID - Sheet 33
233	I-43	P&ID - Sheet 34
234	I-44	P&ID - Sheet 35
235	I-45	Admin Building – SCADA Room Details
236	I-46	Instrumentation Details - Sheet 1
237	I-47	Instrumentation Details - Sheet 2
238	I-48	Instrumentation Details - Sheet 3
239	I-49	Instrumentation Details - Sheet 4
240	I-50	Instrumentation Details - Sheet 5

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. Coordinate sizing and location of yard piping for IW#2 and ASR wells with the City and their project teams.
- 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, conduit schedules, and details to a 60 percent completion level. Coordinate sizing and location of electrical conduits for IW#2 and ASR wells with the City and their project teams.
- Prepare instrumentation drawings for the proposed panels to the City’s SCADA system to a 60 percent completion level. The drawings shall be reviewed by a system integrator familiar with the City’s SCADA system.
- Prepare plumbing and HVAC drawings to a 60 percent completion level.
- Prepare a 60 percent set of Technical Specifications (Project Manual). The instrumentation and control specifications shall be reviewed by a system integrator familiar with the City’s SCADA system.
- Coordinate and attend one (1) workshop with the City to review draft 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.

Design Services for the Westport Wastewater Treatment Facility Expansion

- 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. Coordinate sizing and location of yard piping for IW#2 and ASR wells with the City and their project teams.
- 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, conduit schedules, and details to a 90 percent completion level based on the City's comments on the 60 percent design drawings. Coordinate sizing and location of electrical conduits for IW#2 and ASR wells with the City and their project teams.
- 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 plumbing and HVAC drawings to a 90 percent completion level.
- Prepare a complete draft 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 draft 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 PSL 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, instrumentation drawings, plumbing drawings, and HVAC 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.

Prepare Bid Form and Review Bid Documents

- Prepare a bid form for Part 2 – Facility Expansion and review the final bid documents prepared by the City.

Task 10.2 –Opinions of Probable Construction Cost

Engineer shall prepare opinions of probable construction cost at the 60 percent, 90 percent, and 100 percent design levels for the Westport WWTF Expansion Part 2 – Facility Expansion

TASK 11. BIDDING SERVICES (PART 2)

Pursuant to the Contract, the Engineer shall provide services during the bidding phase of the Westport WWTF Expansion.

Task 11.1 – Bidding Services

Engineer shall perform the following:

- ***Pre-advertise Meeting*** – Engineer shall attend one pre-advertise meeting with the Purchasing Division to assist in preparing the project for bid. The Engineer shall prepare and submit meeting summary within 5 business days of progress meeting.
- ***Pre-bid Conference*** – Engineer shall attend one pre-bid conference at a location selected by the City. ENGINEER’s representative shall answer contractor questions as applicable and take meeting notes.
- ***Question Response/Addenda Preparation*** – Engineer shall assist the City in their preparation of responses to contractor questions, fielded by Purchasing Division, in consultation with the City’s Project Manager.
- ***Bid Opening and Evaluation*** – Engineer at the City’s request may provide assistance in reviewing bid proposals.

TASK 12. CONSTRUCTION PHASE SERVICES (PART 2)

Engineer shall provide services during the construction phase. The duration of construction phase services is based on approximate 18-month construction contract for the Westport WWTF Expansion. Engineer shall perform the following tasks to assist the City during construction of Westport WWTF Expansion to ensure that the project was completed in general conformance with the approved construction documents:

Task 12.1 – Assist the City in Construction Phase Services

Engineer shall perform the following:

- ***Construction Administration*** – The Engineer shall administer the project in conformance with the Construction Contract and its General Conditions. The Engineer shall coordinate with the Contractor and the City during construction.
- ***Conform Contract Documents*** – The Engineer shall conform the contract documents prior to construction. A conformed set of documents with all addendum information incorporated shall be provided.
- ***Preconstruction Conference*** – Prepare Agenda and attend the City’s preconstruction conference with the Contractor. The Engineer shall 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 eighty five (285) submittals are anticipated (including re-submittals).

- **RFI Responses** – Review and respond to requests for information (RFI) from the Contractor. Up to one hundred ninety (190) RFIs are anticipated.
- **Pay Request Review** – Review, recommend and submit to the City for payment the monthly pay request from the Contractor.
- **Site Visits** – Make twenty-four (24) periodic site visits 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 Expansion. Four (4) additional site visits are included for establishment of substantial and final completion of Part 4 of the project.
- **Record Drawings** – Prepare record drawings by transcribing information provided by the Contractor. Engineer shall 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 shall include finish floor elevations, tank elevations, pump centerline elevations and yard piping locations/elevations.
- **Certificate of Completion for Part 2 – Facility Expansion** – Engineer shall prepare FDEP certificate of completion of construction and submit to FDEP for approval.
- **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 Expansion Part 2 – Facility Expansion. O&M manuals shall include master list of spare parts. In addition, original warranties shall 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.
- **Materials and Density Testing Services** – Coordinate with Contractor’s materials and density testing sub-contractor during construction. It is anticipated that testing shall be as follows:
 1. Density testing for compaction related to yard piping and beneath structures.
 2. Slump testing of concrete each delivery and compression testing five cylinders every 50 C.Y. minimum.

TASK 13. RESIDENT PROJECT REPRESENTATIVE (PART 2)

Engineer shall provide resident construction inspector services during the construction phase of the Project to assist the City in observing the progress and quality of the Work.

Engineer shall perform the following:

- **General** – Through RPR's observations of the Contractor's Work, Engineer shall endeavor to provide further protection for the City against defects and deficiencies in the Work. However, Engineer shall not as a result of such observations of the Contractor’s Work, supervise, direct, or have control over the Work, nor shall Engineer (including the RPR) have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by any contractor, or the safety precautions and programs incident to the Work or any contractor's work in progress, for security or safety at the Site, nor for any failure of a contractor to comply with Laws and Regulations applicable to such contractor's performing and furnishing of its work. The Engineer (including RPR) neither guarantees the performance of any contractor nor assumes responsibility for Contractor’s failure to furnish and perform the Work in accordance with the Contract Documents.

- **Construction Progress Meetings** – Engineer (specifically resident project representative and project manager) shall conduct monthly progress meetings with the Contractor and the City. The Engineer shall prepare and submit meeting summaries within 5 business days of progress meetings.
- **Site Inspection**- Engineer shall perform full-time (1 person for 40 hours per week) Resident Project Representative (RPR) as needed for a maximum of 72 weeks for the Westport WWTF Expansion Part 3 – Facility Expansion 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.

TASK 14. POST-CONSTRUCTION OPTIMIZATION AND WARRANTY SERVICES (PART 2)

Engineer shall provide Post-Construction services to assist the City in observing the operation of the completed facility and optimizing the operations. Engineer shall also assist the City with investigations of potential warranty claims for equipment.

Engineer shall:

- Review monthly data and observe operation of the completed project in the field with the City's operations and maintenance staff. Three (3) site visits two (2) months apart are anticipated. A draft and final technical memorandum shall be provided to the City.
- Work together with equipment manufacturers to optimize the performance of the installed equipment (6 months).
- Work together with the City's operations and maintenance staff to identify improvements to the installed equipment or identify process improvements to optimize results (6 months).
- Perform up to four (4) site visits and/or conference calls with the City's operations and maintenance staff to investigate equipment that has malfunctioned and recommend to the City whether to submit a warranty claim to the Contractor.

DELIVERABLES

The Engineer shall provide the City the following deliverables:

- Basis of Design Technical Memorandum.
- NFPA 820 Mitigation Memorandum.
- Budgetary Opinion of Probable Costs for Project.
- Preliminary Design Report and 30 Percent Drawings.
- Work Shop agenda and summaries.
- Five (5) copies of drawings at the scheduled 60 percent, 90 percent and 100 percent Final Design review stage for review by the City. The Final 100 percent design drawings shall 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.
- Five (5) copies of the Project Manual TOC at the 30 percent review, Project Manual partial draft at the 60 percent design review, and final Project Manual at the 90 percent review stage for evaluation by the City.
- Five (5) copies of the Permit application packages required for submittal for regulatory agency review.
- Two (2) copies of final (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).
- O&M manuals.
- Electronic CM Files.

- Draft and final technical memorandums for Post-Construction Services.

A. TIME OF PERFORMANCE

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

Task (Part 1, 2, 3, and 4)	Commencing	Days
Task 1 – Project Administration (Part 1 and 2)	From Date of Notice-to-Proceed (NTP) by the City	1718
Task (Part 1)	Commencing	
Task 2 – Preliminary Engineering Services (Part 1)	From Date of NTP by the City	42
Task 3 – Permitting (Part 1)	From Date of 90% Design Completion	28
Task 4 – Final Design (Part 1)	From Date of NTP by the City	120
Task 5 – Bidding Services (Part 1)	From Date of Acceptance of the Final Design by the City	91
Task 6 – Construction Phase Services (Part 1)	From Date of issuance of Contractor NTP by the City	181
Task 7 – Resident Project Representative (Part 1)	From Date of issuance of Contractor NTP by the City	151
Task (Part 2)	Commencing	
Task 8 – Preliminary Engineering Services (Part 2)	From Date of NTP by the City	181
Task 9 – Permitting (Part 2)	From Date of Preliminary Design Completion	30
Task 10 – Final Design (Part 2)	From Date of Approved Preliminary Design Report by the City	211

Task 11 – Bidding Services (Part 2)	From Date of Acceptance of the Final Design by the City	91
Task 12 – Construction Phase Services (Part 2)	From Date of issuance of Contractor NTP by the City	542
Task 13 – Resident Project Representative (Part 2)	From Date of issuance of Contractor NTP by the City	482
Task 14 – Post-Construction Optimization Services	From Date of Final Acceptance by the City	181

SCHEDULE NOTES:

- Schedule includes 14 days for the City to review of each deliverable. The Schedule shall 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 shall 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 shall 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 shall issue the Notice-to-Proceed to the Contractor for construction projects.

The total duration for the Scope of Services is 1718 days.

B. COMPENSATION

For the professional services set forth in this Specific Authorization, the City shall pay the Engineer a lump sum fee on a percent complete basis for Tasks 1 - 14 as follows:

Task (Part 1 and 2)	Fee
Task 1 – Project Administration (Part 1 and 2)	\$186,600
Task (Part 1 – Process Improvements)	Fee
Task 2 – Preliminary Engineering Services (Part 1)	\$39,560
Surveying	\$21,700 (Survey)
Geotech	\$7,285 (Geotech)
SUE	\$1,500 (SUE)
Task 3 – Permitting (Part 1)	\$14,530

Design Services for the Westport Wastewater Treatment Facility Expansion

Permit Fees	\$800 (Fees)
Task 4 – Final Design (Part 1)	\$180,850
Task 5 – Bidding Services (Part 1)	\$19,235
Task 6 – Construction Phase Services (Part 1)	\$133,081
Task 7 – Resident Project Representative (Part 1)	\$115,500
Total Fee - Tasks –2-7	\$534,041
Task (Part 2 – Facility Expansion)	Fee
Task 8 – Preliminary Engineering Services	\$395,324
Geotech	\$32,440 (Geotech)
SUE	\$4,000 (SUE)
Task 9 – Permitting	\$40,689
Permit Fees	\$5,300 (Fees)
Task 10 – Final Design	\$1,385,029
Task 11 – Bidding Services	\$46,272
Task 12 – Construction Phase Services	\$838,960
Task 13 – Resident Project Representative	\$387,520
Task 14 – Post-Construction Optimization	\$21,000
Total Fee - Tasks 8 - 14	\$3,156,534
Total Fee – Tasks 1 – 14	\$3,877,175

C. CITY’S RESPONSIBILITY

In addition to the City’s responsibilities pursuant to the Contract, the City shall:

- 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.

D. 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.

Design Services for the Westport Wastewater Treatment Facility Expansion

- Preparation of a dewatering plan covering construction dewatering activities that could be needed for SFWMD or FDEP permits.
- Wetlands delineation and mitigation.
- Threatened or endangered species studies.
- Assistance for funding or other services beyond that included in the Project Budget.

**SECTION IV
TIME OF PERFORMANCE**

The Contract shall start 03/13/2018 and shall terminate 03/13/2023, which is 5 years thereafter. In the event all work required in the contract specifications has not been completed by the specified date, the Engineer agrees to provide work at no additional cost as authorized by the Project Manager until all work specified in the contract specifications has been rendered and accepted by the City.

**SECTION V
RENEWAL OPTION**

N/A

**SECTION VI
COMPENSATION**

This is a lump sum Contract in the amount of \$ 3,877,175, plus a one-time \$10.00 indemnification fee. The City shall not pay for out-of-pocket expenses including, but not limited to, office & utilities, Subcontractor fees, or any reimbursable expense. There shall be no additional amount paid for reimbursable expenses. The Engineer shall invoice the City for the amount of the indemnification payment and said invoice shall accompany the signed Contracts.

ENGINEER shall provide any additional services requested by the City in accordance with the Fee Schedule below. Additional services shall not be performed unless specifically requested by the City, and an amendment to this agreement is executed.

REISS ENGINEERING, INC.

Rate Sheet and Position Description

Personnel Position	Rate per hour *
Project Engineer I	\$ 100.00
Project Engineer II	\$ 120.00
Project Engineer III	\$ 135.00
Senior Engineer I	\$ 145.00
Senior Engineer II	\$ 160.00
Senior Engineer III	\$ 175.00
Senior Engineer IV	\$ 200.00

Design Services for the Westport Wastewater Treatment Facility Expansion

Senior Engineer V	\$	230.00
Senior Engineer VI	\$	275.00
Project Manager	\$	165.00
Senior Project Manager I	\$	190.00
Senior Project Manager II	\$	215.00
Discipline Lead/Quality Control Lead	\$	275.00
Principal/Officer	\$	285.00
RPR	\$	115.00
RPR II	\$	145.00
Construction Manager/Senior RPR	\$	185.00
CADD Technician	\$	85.00
Sr. CADD Technician	\$	110.00
Sr. CADD Designer	\$	140.00
Technician I	\$	70.00
Technician II	\$	90.00
Technician III	\$	105.00
Administrator I	\$	60.00
Administrator II	\$	70.00
Senior Administrator	\$	90.00
Project Manager Assistant	\$	95.00

* Rates per hour are for services through 2019. Rates per hour shall increase by 3% in January 2020.

The Consultant shall not be paid additional compensation for any loss or damage, arising out of the nature of the work, from the action of the elements, or from any delay or unforeseen obstruction or difficulties encountered in the performance of the work, or for any expenses incurred by or in consequence of the suspension or discontinuance of the work. Schedule of value for task and time shall be set out as per proposal.

Progress Payments- The City may make partial payment during the progress of the work upon percentage of work completed as approved by the Project Manager.

The Engineer shall not be paid additional compensation for any loss or damage, arising out of the nature of the work, from the action of the elements, or from any delay or unforeseen obstruction or difficulties encountered in the performance of the work, or for any expenses incurred by or in consequence of the suspension or discontinuance of the work.

Invoices for services shall be submitted once a month by the 10th of the month, and payments shall be made in forty-five (45) calendar days unless Engineer has chosen to take advantage of the Purchasing Card

Program, which guarantees payment within several days. Payments shall be made provided the submitted invoice is accompanied by adequate supporting documentation and is approved by the Project Manager.

A proper invoice must include unique invoice number, contractor number, and detailed description of goods and services. The Consultant shall email the original receipt to APNOTIFICATIONS@CITYOFPSL.COM and a copy to the Project Manager.

A Visa Order Form constitutes as the Notice to Proceed.

Engineer VISA Payment Procedures

1. An account with Bank of America (BOA) shall be established for the project. The account dollar limit shall be established by the City's estimate of monthly expense. The account shall also have limits as per the Merchant Category Code (MCC). Reasonable total invoice amounts shall also be established. The account shall be entered with the proper expense codes. The Engineer shall be provided this account number to process payments.
2. A purchase order to the Engineer for this project may not be issued.
3. The Engineer shall send the Project Manager (PM) by the 1st of each month a detailed pay request listing % completed work on task. Partial release of liens shall be provided if Subcontractors were used by Engineer.
4. The PM shall audit to determine that work and materials that are being billed have been completed and installed as per contract specifications. The PM shall verify the partial release of liens. The PM shall sign documents that state the payment is correct and payment by the City is authorized.
5. The PM shall email the approved pay request to the Contract Specialist, City's P-Card Administrator and the Engineer to proceed with placing the charge on the BOA specified account.
6. The Engineer may not place the charge on the account until contacted by the City giving approval. Under no circumstances shall the account be used between the 1st and 5th of the month.
7. Invoices that are not approved by the PM shall be returned to the Engineer with a detailed explanation.
8. Procurement Management Department shall balance statement and issue all dispute items.
9. Procurement Management Department shall produce summary sheet and send all documentation to Finance for payment.

All work compensated for under this Contract, including partial payments, shall become the property of the City of Port St. Lucie without restrictions or limitations. Work under this Contract shall include, but not be limited to, sketches, tracings, drawings, computations, details, design calculations, plan, electronic files and other related documents. The Engineer shall not be held liable for any reuse of the work and shall not be held liable for any modifications made to the work by others.

All invoices and correspondence relative to this Contract must contain the last 4 digits of the BOA account and Contract number, unique invoice number, and detail of services provided.

**SECTION VII
WORK CHANGES**

The City reserves the right to order work changes in the nature of additions, deletions or modifications without invalidating the Contract, and agrees to make corresponding adjustments in the contract price and time for completion. All changes shall be authorized by a written change order approved by the Procurement Department Director, or her designee. Work shall be changed and the contract price and completion time shall be modified only as set out in the written change order. Any adjustment in the contract price resulting in a credit or a charge to the City shall be at cost. Any dispute concerning work changes which is not resolved by mutual agreement shall be decided by the City Manager who shall reduce the decision to writing. The decision of the City shall be final and conclusive.

**SECTION VIII
CONFORMANCE WITH BID**

It is understood that the materials and/or work required herein are in accordance with the bid made by the Engineer pursuant to the Invitation to Bid and Specifications on file in the Procurement Management Department of the City. All documents submitted by the Engineer in relation to said bid, and all documents promulgated by the City for inviting bids are, by reference, made a part hereof as if set forth herein in full.

**SECTION IX
Indemnification/Hold Harmless**

Engineer agrees to indemnify, defend and hold harmless, the City, its officers, agents, and employees from, and against any and all claims, actions, liabilities, losses and expenses including, but not limited to, attorney's fees for personal, economic or bodily injury, wrongful death, loss of or damage to property, at law or in equity, which may arise or may be alleged to have risen from the negligent acts, errors, omissions or other wrongful conduct of Engineer, agents, laborers, subcontractors or other personnel entity acting under Engineer control in connection with the Engineer's performance of services under this Contract and to that extent Engineer shall pay such claims and losses and shall pay all such costs and judgments which may issue from any lawsuit arising from such claims and losses including wrongful termination or allegations of discrimination or harassment, and shall pay all costs and attorney's fees expended by the City in defense of such claims and losses including appeals. That the aforesaid hold-harmless Contract by Engineer shall apply to all damages and claims for damages of every kind suffered, or alleged to have been suffered, by reason of any of the aforesaid operations of Engineer or any agent laborers, subcontractors or employee of Engineer regardless of whether or not such insurance policies shall have been determined to be applicable to any of such damages or claims for damages. Engineer shall be held responsible for any violation of laws, rules, regulations or ordinances affecting in any way the conduct of all persons engaged in or the materials or methods used by Engineer on the work. As consideration for this indemnity provision the Engineer shall be paid the one time only sum of ten dollars (\$10.00), which shall be added to the contract price, and paid prior to commencement of work. This indemnification shall survive the termination of this Contract

**SECTION X
SOVERIEGN IMMUNITY**

Nothing contained in this Contract shall be deemed or otherwise interpreted as waiving the City's sovereign immunity protections existing under the laws of the State of Florida, or as increasing the limits of liability as set forth in Section 768.28, Florida Statutes.

**SECTION XI
INSURANCE**

The Contractor shall, on a primary basis and at its sole expense, agree to maintain in full force and effect at all times during the life of this Contract, insurance coverage, limits, including endorsements, as described herein. The requirements contained herein, as well as City's review or acceptance of insurance maintained by Contractor are not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by Contractor under the Contract.

The parties agree and recognize that it is not the intent of the City of Port St. Lucie that any insurance policy/coverage that it may obtain pursuant to any provision of this Contract shall provide insurance coverage to any entity, corporation, business, person, or organization, other than the City of Port St. Lucie and the City shall not be obligated to provide any insurance coverage other than for the City of Port St. Lucie or extend its sovereign immunity pursuant to Section 768.28, Florida Statutes, under its self-insured program. Any provision contained herein to the contrary shall be considered void and unenforceable by any party. This provision does not apply to any obligation imposed on any other party to obtain insurance coverage for this project, any obligation to name the City of Port St. Lucie as an additional insured under any other insurance policy, or otherwise protect the interests of the City of Port St. Lucie as specified in this Contract.

Workers' Compensation Insurance & Employer's Liability: The Contractor shall agree to maintain Workers' Compensation Insurance & Employers' Liability in accordance with Section 440, Florida Statutes. Employers' Liability and must include limits of at least \$100,000.00 each accident, \$100,000.00 each disease/employee, \$500,000.00 each disease/maximum. A Waiver of Subrogation endorsement shall be provided. Coverage shall apply on a primary basis. Should scope of work performed by Contractor qualify its employee for benefits under Federal Workers' Compensation Statute (example, U.S. Longshore & Harbor Workers Act or Merchant Marine Act), proof of appropriate Federal Act coverage must be provided.

Commercial General Liability Insurance: The Contractor shall agree to maintain Commercial General Liability insurance issued under an Occurrence form basis, including Contractual liability, to cover the hold harmless agreement set forth herein, with limits of not less than:

Each occurrence	\$1,000,000
Personal/advertising injury	\$1,000,000
Products/completed operations aggregate	\$2,000,000
General aggregate	\$2,000,000
Fire damage	\$100,000 any 1 fire
Medical expense	\$10,000 any 1 person

Additional Insured: An Additional Insured endorsement **must** be attached to the certificate of insurance (should be CG2026) under the General Liability policy. Coverage is to be written on an occurrence form

basis and shall apply as primary. A per project aggregate limit endorsement should be attached. Defense costs are to be in addition to the limit of liability. A waiver of subrogation shall be provided in favor of the City. Coverage shall extend to independent contractors and fellow employees. Contractual Liability is to be included. Coverage is to include a cross liability or severability of interests provision as provided under the standard ISO form separation of insurers clause.

Except as to Workers' Compensation and Employers' Liability, said Certificate(s) and policies shall clearly state that coverage required by the Contract has been endorsed to include the City of Port St. Lucie, a municipality of the State of Florida, its officers, agents and employees as Additional Insured added to its Commercial General Liability policy and Business Auto policy. The name for the Additional Insured endorsement issued by the insurer shall read "**City of Port St. Lucie, a municipality of the State of Florida, it's officers, employees and agents and shall include Contract #20170132 Design Services for the Westport WWTF Expansion Project shall be listed as additionally insured.**". The Policy shall be specifically endorsed to provide thirty (30) day written notice to the City prior to any adverse changes, cancellation, or non-renewal of coverage thereunder. In the event that the statutory liability of the City is amended during the term of this Contract to exceed the above limits, the Contractor shall be required, upon thirty (30) days written notice by the City, to provide coverage at least equal to the amended statutory limit of liability of the City. Copies of the Additional Insured endorsements shall be attached to the Certificate of Insurance. All independent contractors and subcontractors utilized in this project shall furnish a Certificate of Insurance to the City in accordance with the same requirements set forth herein.

Automobile Liability Insurance: The Contractor shall agree to maintain Business Automobile Liability at a limit of liability not less than \$1,000,000.00 each accident covering any auto, owned, non-owned and hired automobiles. In the event, the Contractor does not own any automobiles; the Business Auto Liability requirement shall be amended allowing Contractor to agree to maintain only Hired & Non-Owned Auto Liability. This amended requirement may be satisfied by way of endorsement to the Commercial General Liability, or separate Business Auto Coverage form. Certificate holder must be listed as additional insured. A waiver of subrogation shall be provided. Coverage shall apply on a primary basis.

Professional Liability: Engineer shall agree to maintain Professional Liability, or equivalent Errors & Omissions Liability at a limit of liability not less than \$1,000,000 Per Occurrence. When a self-insured retention (SIR) or deductible exceeds \$10,000 the City reserves the right, but not the obligation, to review and request a copy of Engineer's most recent annual report or audited financial statement. For policies written on a "Claims-Made" basis, the Engineer warrants the retroactive date equals or precedes the effective date of this Contract. In the event the policy is canceled, non-renewed, switched to an Occurrence Form, retroactive date advanced, or any other event triggering the right to purchase a Supplemental Extended Reporting Period (SERP) during the life of this Contract, Engineer shall agree to purchase a SERP with a minimum reporting period not less than three (3) years. If policy contains an exclusion for dishonest or criminal acts, defense coverage for the same shall be provided.

Waiver of Subrogation: The Contractor shall agree by entering into this Contract to a Waiver of Subrogation for each required policy. When required by the insurer, or should a policy condition not permit an Insured to enter into a pre-loss Contract to waive subrogation without an endorsement then Contractor shall agree to notify the insurer and request the policy be endorsed with a Waiver of Transfer of Rights of Recovery Against Others, or its equivalent. This Waiver of Subrogation requirement shall not apply to any policy where a condition to the policy specifically prohibits such an endorsement, or voids coverage should Contractor enter into such a Contract on a pre-loss basis.

Deductibles: All deductible amounts shall be paid for and be the responsibility of the Contractor

for any and all claims under this Contract. Where an SIR or deductible exceeds \$10,000, the City of Port St. Lucie reserves the right, but not obligation, to review and request a copy of the bidder's most recent annual report or audited financial statement.

It shall be the responsibility of the Contractor to ensure that all independent contractors and/or subcontractors comply with the same insurance requirements referenced above.

The Contractor may satisfy the minimum limits required above for either Commercial General Liability, Business Auto Liability, and Employers' Liability coverage under Umbrella or Excess Liability. The Umbrella or Excess Liability shall have an Aggregate limit not less than the highest "Each Occurrence" limit for either Commercial General Liability, Business Auto Liability, or Employers' Liability. When required by the insurer, or when Umbrella or Excess Liability is written on Non-Follow Form," the City shall be endorsed as an "Additional Insured."

The City, by and through its Risk Management Department, reserves the right, but not obligation, to review, modify, reject, or accept any required policies of insurance including limits, coverages or endorsements, herein from time to time throughout the term of this contract. All insurance carriers must have an AM Best rating of at least A: VII or better.

A failure on the part of the contractor to execute the contract and/or punctually deliver the required insurance, and other documentation may be cause for annulment of the award.

SECTION XII ACTS OF GOD

The Engineer shall be responsible for all preparation of the site for Acts of God, including but not limited to; earthquake, flood, tropical storm, hurricane or other cataclysmic phenomenon of nature, rain, wind or other natural phenomenon of normal intensity, including extreme rainfall. No reparation shall be made to the Engineer for damages to the Work resulting from these Acts. The City is not responsible for any costs associated with pre or post preparations for any Acts of God.

Emergencies – In the event of emergencies affecting the safety of persons, the work, or property, at the site or adjacent thereto, the Contractor, or his designee, without special instruction or authorization from the City, is obligated to act to prevent threatened damage, injury or loss. In the event such actions are taken, the Contractor shall promptly give to the City written notice and contact immediately by phone, of any significant changes in work or deviations from the Contract documents caused thereby, and if such action is deemed appropriate by the City a written authorization signed by the City covering the approved changes and deviations shall be issued.

SECTION XIII PROHIBITION AGAINST FILING OR MAINTAINING LIENS AND SUITS

Subject to the laws of the State of Florida and of the United States, neither Engineer nor any subconsultant supplier of materials, laborer or other person shall file or maintain any lien for labor or materials delivered in the performance of this Contract against the City. The right to maintain such lien for any or all of the above parties is hereby expressly waived.

SECTION XIV COMPLIANCE WITH LAWS

The Engineer shall give all notices required by and shall otherwise comply with all applicable laws, ordinances, and codes and shall, at his own expense, secure and pay the fees and charges for all permits required for the performance of the Contract. All materials furnished and works done are to comply with all federal, state, and local laws and regulations. Engineer shall comply with all requirements of 28 C.F.R. § 35.151. Engineers and Subcontractor shall comply with § 119.0701, Fla. Stat. The Engineer and Subcontractor are to allow public access to all documents, papers, letters, or other material made or received by the Engineer in conjunction with this Contract, unless the records are exempt from Art. I, § 24(a), Fla. Const. and § 119.07(1)(a), Fla. Stat. Pursuant to § 119.10(2)(a), Fla. Stat., any person who willfully and knowingly violates any of the provisions of Ch. 119, Laws of Fla., commits a misdemeanor of the first degree, punishable as provided in § 775.082 and § 775.083 Fla. Stat.

RECORDS

The City of Port St. Lucie is a public agency subject to Chapter 119, Florida Statutes. The Contractor shall comply with Florida's Public Records Law. CONTRACTOR'S RESPONSIBILITY FOR COMPLIANCE WITH CHAPTER 119, FLORIDA STATUTES. Pursuant to Section 119.0701, F.S.

Contractor agrees to comply with all public records laws, specifically to:

Keep and maintain public records required by the City in order to perform the service;

1. The timeframes and classifications for records retention requirements must be in accordance with the General Records Schedule GS1-SL for State and Local Government Agencies. (*See <http://dos.dos.state.fl.us/library-archives/records-management/general-records-schedules/>*).
2. During the term of the contract, the Contractor shall maintain all books, reports and records in accordance with generally accepted accounting practices and standards for records directly related to this contract. The form of all records and reports shall be subject to the approval of the City.
3. Records include all documents, papers, letters, maps, books, tapes, photographs, films, sound recordings, data processing software, or other material, regardless of the physical form, characteristics, or means of transmission, made or received pursuant to law or ordinance or in connection with the transaction of official business with the City. Contractor's records under this Contract include but are not limited to, supplier/subcontractor invoices and contracts, project documents, meeting notes, emails and all other documentation generated during this Agreement.
4. The Contractor agrees to make available to the City, during normal business hours all books of account, reports and records relating to this contract.
5. A Contractor who fails to provide the public records to the City within a reasonable time may also be subject to penalties under Section 119.10, Florida Statutes.

Upon request from the City's custodian of public records, provide the public agency with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in this chapter or as otherwise provided by law.

Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the City.

Upon completion of the contract, transfer, at no cost to the City, all public records in possession of the Contractor, or keep and maintain public records required by the City to perform the service. If the Contractor transfers all public records to the City upon completion of the contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Contractor keeps and maintains public records upon completion of the contract, the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City's custodian of public records in a format that is compatible with the information technology systems of the City.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

**CITY CLERK
121 SW Port St. Lucie Blvd.
Port St. Lucie, FL 34984
(772) 871 5157
prr@cityofpsl.com**

**SECTION XV
CLEANING UP
N/A**

**SECTION XVI
INSPECTION AND CORRECTION OF DEFECTS**

Deductions - In the event the City deems it expedient to perform work which has not been done by the Engineer(s) as required by these Specifications, or to correct work which has been improperly and/or inadequately performed by the Engineer(s) as required in these Specifications, all expenses thus incurred by the City, in the City's option, shall be invoiced to the Engineer(s) and/or may be deducted from payments due to the Engineer(s). Deductions thus made shall not excuse the Engineer(s) from other penalties and conditions contained in the Contract.

**SECTION XVII
ADDITIONAL REQUIREMENTS**

In the event of any conflict between the terms and conditions, appearing on any purchase order issued relative to this Contract, and those contained in this Contract and the Specifications herein referenced, the terms of this Contract and Specifications herein referenced shall apply.

**SECTION XVIII
ASSIGNMENT**

Engineer shall not delegate, assign or subcontract any part of the work under this Contract or assign any monies due him hereunder without first obtaining the written consent of the City.

**SECTION XIX
TERMINATION**

If the Engineer refuses or fails to prosecute the work with such diligence as shall insure its completion within the time specified in this Contract, or as may be modified in accordance with this Contract, the City by written notice to the Engineer, may terminate Engineer's rights to proceed. On such termination, the City may take over the work and prosecute the same to completion, by contract or otherwise, and the Engineer and his sureties shall be liable, to the City for any additional cost incurred by it in its completion of the work.

The City may terminate this Contract with or without cause by giving the Engineer thirty (30) calendar days' notice in writing. Upon delivery of said notice and upon expiration of thirty (30) calendar day period, the Engineer shall discontinue all services in connection with the performance of this Contract and shall proceed to promptly cancel all related existing third-party contracts. Termination of the Contract by the City pursuant to this paragraph shall terminate all of the City's obligations hereunder and no charges, penalties to other costs shall be due to the Engineer except work timely completed.

**SECTION XX
LAW, VENUE AND WAIVER OF JURY TRIAL**

This Contract is to be construed as though made in and to be performed in the State of Florida and is to be governed by the laws of Florida in all respects without reference to the laws of any other state or nation. The venue of any action taken pursuant to this Contract shall be in St. Lucie County, Florida.

The Parties to this Contract hereby freely, voluntarily and expressly, waive their respective rights to trial by jury on any issues so triable after having the opportunity to consult with an attorney.

**SECTION XXI
APPROPRIATION APPROVAL**

The Engineer acknowledges that the City of Port St Lucie's performance and obligation to pay under this Contract is contingent upon an annual appropriation by the City Council. The Engineer agrees that, in the event such appropriation is not forthcoming, this Contract may be terminated by the City and that no charges, penalties or other costs shall be assessed.

**SECTION XXII
TRUTH-IN-NEGOTIATIONS**

In accordance with the provisions of Section 287.055, Florida Statutes, the Engineer agrees to execute a truth-in-negotiations certificate and agrees that the original Contract price and any additions may be adjusted to

exclude any significant sums by which the Contract price was increased due to inaccurate, incomplete or non-current wage rates and other factual unit costs.

**SECTION XXIII
CONFLICT OF INTEREST**

The City hereby acknowledges that the Engineer may be performing professional services for private developers within the Treasure Coast area. Should a conflict of interest arise between providing services to the City and/or other clients, the Engineer shall terminate its relationship with the other client to resolve the conflict of interest. The City Manager shall determine whether a conflict of interest exists. At the time of each Project Proposal the Engineer shall disclose all of its Treasure Coast clients and related Scope of Work.

**SECTION XXIV
PROHIBITION AGAINST CONTINGENT FEES**

The Engineer warrants that he or she has not employed or retained any company or person, other than a bona fide employee working solely for the Engineer to solicit or secure this Contract and that he or she has not paid or agreed to pay any person, company, corporation, individual, or firm, other than a bona fide employee working solely for the Engineer any fee, commission, percentage, gift, or other consideration contingent upon or resulting from the award or making of this Contract.

**SECTION XXV
ATTORNEY'S FEES**

If this matter is placed in the hands of an attorney for collection, or in the event suit or action is instituted by the City to enforce any of the terms or conditions of the Contract, Engineer shall pay to the City, in such suit or action in both trial court and appellate court, the City's costs, and reasonable attorney's fees for the anticipated cost of collection and judgment enforcement.

**SECTION XXVI
POLICY OF NON-DISCRIMINATION**

Engineer shall not discriminate against any person in its operations, activities or delivery of services under this Contract. Engineer shall affirmatively comply with all applicable provisions of federal, state and local equal employment laws and shall not engage in or commit any discriminatory practice against any person based on race, age, religion, color, gender, sexual orientation, national origin, marital status, physical or mental disability, political affiliation or any other factor which cannot be lawfully used as a basis for service delivery.

**SECTION XXVII
SEVERABILITY**

The Parties to this Contract expressly agree that it is not their intention to violate any public policy, statutory or common law rules, regulations, or decisions of any governmental or regulatory body. If any provision of this Contract is judicially or administratively interpreted or construed as being in violation of any such policy, rule, regulation, or decision, the provision, sections, sentence, word, clause, or combination thereof causing such violation shall be inoperative (and in lieu thereof there shall be inserted such provision, section, sentence, word, clause, or combination thereof as may be valid and consistent with the intent of the Parties under this Contract) and the remainder of this Contract, as amended, shall remain binding upon the Parties, unless the inoperative provision would cause enforcement of the remainder of this Contract to be inequitable under the circumstances.

**SECTION XXVIII
ENTIRE AGREEMENT**

The written terms and provisions of this Contract shall supersede any and all prior verbal or written statements of any official or other representative of the City. Such statements shall not be effective or be construed as entering into, or forming a part of, or altering in any manner whatsoever, this Contract or Contract documents.

Balance of page intentionally left blank

IN WITNESS WHEREOF, the parties have executed this contract, the day and year first above written.

CITY OF PORT ST. LUCIE FLORIDA

REISS ENGINEERING, INC.

By: Clyde Shorahyga
City Purchasing Agent

By: [Signature]

State of: Florida County of: Seminole

Before me personally appeared: C. Robert Reiss
(Please print)

Please check one:

Personally known _____
Produced Identification: _____
(Type of identification)

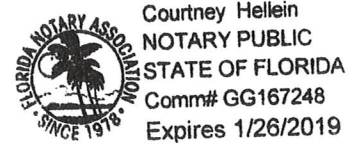
and known to me to be the person described in and who executed the foregoing instrument, and acknowledged to and before me that he executed said instrument for the purposes therein expressed.
(s/he)

WITNESS my hand and official seal, this 27th day of February, 2018.

[Signature]
Notary Signature

Notary Public State of Florida at Large.

My Commission Expires 1/26/2019.



(seal)



Purchase Order

Fiscal Year 2018 Page 1 of 2

THIS NUMBER MUST APPEAR ON ALL INVOICES, PACKAGES AND SHIPPING PAPERS.

Purchase Order # **20180487-00**

Unless otherwise specified all deliveries are for inside delivery

BILL TO

PLEASE SEND INVOICES TO:
APNOTIFICATIONS@CITYOFPSL.COM

VENDOR

REISS ENGINEERING, INC.
1016 SPRING VILLAS POINTE
WINTER SPRINGS FL 32708

SHIP TO

UTILITIES DEPT - PRINEVILLE
WAREHOUSE
1001 SE PRINEVILLE ST
PORT SAINT LUCIE FL 34983
772-873-6400

Vendor Phone Number		Vendor Fax Number		Requisition Number		Delivery Reference	
407 679-5358		407 679-5003		600			
Date Ordered	Vendor Number	Date Required	Freight Method/Terms			Department/Location	
03/16/2018	198395	03/13/2023				Office of Procurement Mgmt.	
Item#	Description/Part No.			Qty	UOM	Unit Price	Extended Price
	Contract #20170132						
	The Above Purchase Order Number Must Appear On All Correspondence - Packing Sheets And Bills Of Lading						
	PO constitutes Notice to Proceed FOB Destination. Email all invoices to APnotifications@cityofpsl.com PO number must be on Invoice. Invoice must include same detail as PO Unit prices on invoice must equal unit prices on PO						
1	Task 1 - Project Administration (Part 1 and 2) 448 .35.3512.563004.Y1728			1.0	LS	\$186,600.000	\$186,600.00
2	Task 2 - Preliminary Engineering Services (Part 1) - Surveying, Geotech, and SUE 448 .35.3512.563004.Y1728			1.0	LS	\$70,045.000	\$70,045.00
3	Task 3 - Permitting (Part 1) - Permit Fees, 448 .35.3512.563004.Y1728			1.0	LS	\$15,330.000	\$15,330.00
4	Task 4 - Final Design (Part 1) 448 .35.3512.563004.Y1728			1.0	LS	\$180,850.000	\$180,850.00
5	Task 5 - Bidding Services (Part 1) 448 .35.3512.563004.Y1728			1.0	LS	\$19,235.000	\$19,235.00
6	Task 6 - Construction Phase Services (Part 1) 448 .35.3512.563004.Y1728			1.0	LS	\$133,081.000	\$133,081.00
7	Task 7 - Resident Project Representative (Part 1) 448 .35.3512.563004.Y1728			1.0	LS	\$115,500.000	\$115,500.00
8	Task 8 - Preliminary Engineering Services, Geotech & SUE 448 .35.3512.563004.Y1728			1.0	LS	\$431,764.000	\$431,764.00
9	Task 9 - Permitting, Permit Fees 448 .35.3512.563004.Y1728			1.0	LS	\$45,989.000	\$45,989.00
10	Task 10 - Final Design			1.0	LS	\$1,385,029.000	\$1,385,029.00

You may find the Terms and Conditions on
www.cityofpsl.com

State Tax Exempt Number 85-8012667200C-5
Federal Excise #614662

By Cheryl Shanaberger

VENDOR COPY

PO Total

\$3,877,185.00



Purchase Order

Fiscal Year 2018

Page 2 of 2

THIS NUMBER MUST APPEAR ON ALL INVOICES, PACKAGES AND SHIPPING PAPERS.

Purchase Order # **20180487-00**

Unless otherwise specified all deliveries are for inside delivery

BILL TO

PLEASE SEND INVOICES TO:
APNOTIFICATIONS@CITYOFPSL.COM

VENDOR

REISS ENGINEERING, INC.
1016 SPRING VILLAS POINTE
WINTER SPRINGS FL 32708

SHIP TO

UTILITIES DEPT - PRINEVILLE
WAREHOUSE
1001 SE PRINEVILLE ST
PORT SAINT LUCIE FL 34983
772-873-6400

Vendor Phone Number		Vendor Fax Number		Requisition Number		Delivery Reference	
407 679-5358		407 679-5003		600			
Date Ordered	Vendor Number	Date Required	Freight Method/Terms			Department/Location	
03/16/2018	198395	03/13/2023				Office of Procurement Mgmt.	
Item#	Description/Part No.			Qty	UOM	Unit Price	Extended Price
	448 .35.3512.563004.Y1728						\$1,385,029.00
11	Task 11- Bidding Services 448 .35.3512.563004.Y1728			1.0	LS	\$46,272.000	\$46,272.00
12	Task 12 - Construction Phase Services 448 .35.3512.563004.Y1728			1.0	LS	\$838,960.000	\$838,960.00
13	Task 13 - Resident Project Representative 448 .35.3512.563004.Y1728			1.0	LS	\$387,520.000	\$387,520.00
14	Task 14 - Post-Construction Optimization 448 .35.3512.563004.Y1728			1.0	EACH	\$21,000.000	\$21,000.00
15	Indemnification Fee 448 .35.3512.563004.Y1728			1.0	EACH	\$10.000	\$10.00
<p>***Purchase Order Constitues as Notice to Proceed*** Contract #20170132 Project Name: Design Services for the Westport WWTP Expansion Start Date: 03/13/18 End date: 03/13/23 Project Time: 5 consecutive years Council approval: 02/26/18</p>							

You may find the Terms and Conditions on
www.cityofpsl.com

State Tax Exempt Number 85-8012667200C-5
Federal Excise #614662

By Cheryl Shanaberger

VENDOR COPY

PO Total

\$3,877,185.00