

TASK ORDER NO. 14

SCOPE OF SERVICES AND FEE PROPOSAL

2022 WWTF SWD ADMINISTRATIVE ORDER COMPLIANCE

CITY OF NEW PORT RICHEY

I. PROJECT SCOPE

Description:

The City of New Port Richey (CITY) owns and operates the New Port Richey Wastewater Treatment Facility (WWTF), located at 4730 Main Street, New Port Richey, FL 34652. The WWTF has a treatment capacity of 7.5 Million Gallon Per Day (MGD) based on an Annual Average Daily Flow (AADF) measurement. The plant provides effluent meeting the Florida Department of Environmental Protection (FDEP) classification of Part III – Slow-Rate Public Access Reuse Systems under FAC 62-610, in which all treated effluent currently is disposed through the City's Master Urban Reuse System and the Pasco County Master Reuse System. During wet weather conditions when the reuse systems are not able to accept the WWTF effluent, the WWTF's current Domestic Wastewater permit (November 2017 through November 2022) allows the CITY to direct flows to the Surface Water Discharge (SWD) via the Cross Bayou outfall to the Gulf of Mexico, a Class III surface waters of the State.

The permit included an Administrative Order No. AO-005-SWD17, setting the implementation steps and compliance timelines for the CITY to submit a Plan of Study (POS), perform the Study, and submit a Permit Revision Application based on the results of the Study; all to be completed within the 5 year permit period. The purpose for the Study was to evaluate reasonable potential for discharge to cause or contribute to nonattainment of Numeric Nutrient Criteria and provide recommendations regarding compliance. A prior consultant completed the POS and the majority of the Study. FDEP has requested additional information specifically for copper levels in the WWTF influent and effluent, as relates to the copper concentration limit of 3.7 µg/L in the SWD receiving waters.

The CITY has requested Stroud Engineering Consultants, Inc. (ENGINEER) assist the CITY in preparing a copper sampling and testing plan, evaluate coagulant/precipitate treatment options for copper reduction, and prepare a report of the plan results.

Mr. Brent Heath, P.E. will serve as the ENGINEER's project manager on this task order for the duration of the scope of services. The ENGINEER will provide project management as part of this work authorization, which shall include: continuous management and coordination of the overall project; preparation of miscellaneous correspondence; coordination of subconsultant services; necessary coordination and scheduling of permitting activities; and attendance at project meetings (as requested) with the CITY. A written summary of the project status and completed tasks will be provided with each invoice submitted by the ENGINEER.

Based on the above background discussion, the following specific tasks and services are anticipated for this project, and are included in this Scope of Services:

TASK 1 DATA ACQUISITION AND REVIEW

- The ENGINEER will obtain previous reports, wastewater flow records, water quality data, other data relative to the facility, correspondence records with FDEP and prior consultants, etc.

- Review the CITY's existing wastewater treatment facility, the operating performance of the facility, and conduct an inspection of the plant.

TASK 2 PROJECT MANAGEMENT AND FDEP COMMUNICATION

- The ENGINEER will meet with FDEP to explain the CITY's direction as a continuation of the POS regarding copper testing/reduction plan of action. Gene Heath will lead communication with FDEP.
- The ENGINEER will provide periodic communication with FDEP and the CITY throughout the project. Gene Heath will be primary point of contact with FDEP and the CITY.

TASK 3 REVISE SB 64 CHECKLIST AND PLAN

- The ENGINEER will prepare a revised SB 64 Checklist that explains that the CITY's WWTF meets the requirements of the SB 64 rule. The ENGINEER will prepare a cover letter to FDEP and resubmit the document.

TASK 4 COPPER TESTING AND ANALYSIS PLAN

- The ENGINEER will provide a copper collection and data review, and confirm that the testing methodologies and laboratories provide consistent results.
- The ENGINEER will assist the CITY in conducting a copper point source assessment to determine if there is any variation in the copper concentrations in the CITY's collection system. If there is a location where high copper concentrations occur, the ENGINEER will assist the CITY in locating a point source of copper.
- Evaluate infiltration in the collection system in conjunction with connected domestic source seasonal fluctuations.
- Evaluate current treatment process effectiveness for copper removal.
- The ENGINEER will develop bench scale testing methodologies for the potential treatment options at the WWTF based on the results of the data review, influent copper assessment, and treatment evaluation.

TASK 5 WWTF BENCH TESTING

- It is anticipated that the treatment process may be improved to provide a further reduction of the copper concentration in wet weather. The data coming from the City for January/February 2022 would indicate that the copper removal rate with current treatment averages about 93%. The copper is removed along with the sludge in the oxidation/clarification/filtration process steps. If this removal can be improved by 5%, the level of copper in the effluent will meet the surface water criteria.
- The City has used alum as a coagulant aid in the past to lower turbidity. This type of enhanced treatment may also provide benefits to reduce copper. The ENGINEER will assist the CITY with testing the use of alum to reduce copper by bench scale or jar testing of the wastewater at each of the various treatment steps.
- There are coagulant and/or precipitant aids that are specifically formulated to address and

remove dissolved metals such as copper. The ENGINEER will identify and assist the CITY with testing these coagulants by bench scale or jar testing of the wastewater at each of the various treatment steps.

- Based on the results of the jar testing, the ENGINEER will assist the CITY with conducting a full scale operational test on the WWTF.

TASK 6 DO IMPACTS ON SWD

- Another criteria of the surface water discharge raised by DEP was any possible impact on the level of oxygen in the surface water. Although this has not been determined to be an issue, the use of a coagulant to decrease copper may likely reduce oxygen demand in the effluent and assure the DO criteria is met regarding the effluent.
- The ENGINEER will assist the CITY in conducting BOD and DO tests at treatment steps and the effect of coagulant or precipitant aid at various treatment steps.

TASK 7 SUMMARY REPORT

- The ENGINEER will compile results of influent and effluent copper testing, bench scale/jar testing of copper reduction, precipitate efficacies, etc. Provide recommendations for the CITY operations of the WWTF to maximize copper removal in wet weather discharge.
- The ENGINEER will correspond with the CITY and FDEP on study results.
- The ENGINEER will prepare final Study Report as called for in the Administrative Order if study results are acceptable.

TASK 8 PROJECT ALLOWANCE FOR AUTHORIZED ADDITIONAL WORK

- In the event that other additional work is required or requested by the CITY, which may arise from unforeseen field conditions, change in the project limits, the need for additional testing data, and/or permitting services, this task is intended to provide an allowance for such work. Such additional work shall be authorized in writing by CITY.

II. DELIVERABLES

This Scope of Services is to include the following deliverables:

- Final Study Report to complete the Study phase of the Administrative Order.

III. ADDITIONAL SERVICES REQUIRING AUTHORIZATION IN ADVANCE

During the course of the work, the ENGINEER shall notify the CITY in writing of any unanticipated costs or out of scope work and shall provide a new estimate for that work to the CITY for approval.

If required by the ENGINEER and authorized by the CITY, additional services related to this Work Authorization shall be provided by the ENGINEER for additional professional fees negotiated with and agreed to by the CITY. It is anticipated that the allowance in Task 8 will provide the funding for additional authorized engineering services.

IV. EXCLUSIONS AND CONDITIONS

This following exclusions and conditions apply to the Scope of Services:

- It is the ENGINEER's understanding that the CITY will provide the following items to support the ENGINEER's efforts:
 - The CITY will be responsible for payment of all laboratory fees related to sampling and test analyses for copper, BOD, and DO.
 - The CITY will provide staff and equipment to conduct all bench scale testing for the duration of the project.
 - The CITY will be responsible for payment of any coagulant/precipitant product costs for use in the bench testing.
 - Should full scale testing be determined necessary, the CITY will provide coagulant feed equipment and sampling ability as needed.

V. ENGINEER'S COMPENSATION

For Tasks 1 – 8 described above, the CITY will compensate the ENGINEER on a fixed fee basis. Compensation to the ENGINEER for the services included in the above tasks shall not exceed the following:

1.	DATA ACQUISITION AND REVIEW	\$ 6,160.00
2.	PROJECT MANAGEMENT AND FDEP COMMUNICATION	\$ 5,740.00
3.	REVISE SB 64 CHECKLIST AND PLAN	\$ 2,160.00
4.	COPPER TESTING AND ANALYSIS PLAN	\$ 5,180.00
5.	WWTF BENCH TESTING	\$ 10,840.00
6.	DO IMPACTS ON SWD	\$ 3,090.00
7.	SUMMARY REPORT	\$ 15,580.00
8.	PROJECT ALLOWANCE FOR AUTHORIZED ADDITIONAL SERVICES	\$ 10,000.00
	TOTAL AUTHORIZATION	\$ 58,750.00

VI. ADDITIONAL SERVICES REQUIRING AUTHORIZATION IN ADVANCE

If required by the ENGINEER and authorized by the CITY, additional services related to this Task Order shall be provided by the ENGINEER for additional professional fees negotiated with and agreed to by the CITY.

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Stroud Engineering Consultants, Inc.

A. SCOPE OF SERVICES – The City of New Port Richey hereby authorizes the firm of Stroud Engineering Consultants, Inc. to perform the specific services summarized on the attached statement entitled TASK ORDER NO. 14, SCOPE OF SERVICES AND FEE PROPOSAL.

B. TIME OF COMPLETION – Work under this Authorization will begin upon Notice to Proceed from the City and will be completed within the schedule presented on the attached statement entitled TASK ORDER NO. 14, SCOPE OF SERVICES AND FEE PROPOSAL.

C. KEY PERSONNEL – Stroud Engineering Consultants, Inc. shall appoint a single representative with whom the City of New Port Richey shall coordinate. This representative shall have the authority to transmit instructions, receive information, interpret and deliver decisions, etc. Key personnel assigned to the project by Stroud Engineering Consultants, Inc. shall not be removed from the project without the prior written approval of the City of New Port Richey. For this authorization key personnel are as follows: Brent Heath, P.E.

D. COMPENSATION – Professional fees for this authorization will be fixed fee in accordance with the AGREEMENT FOR GENERAL UTILITY ENGINEER, WATER-RESOURCE AND ENVIRONMENTAL CONTINUING SERVICES (GUE&WR&EC) with the City of New Port Richey, dated February 11, 2020.

E. ACCEPTANCE – By signature hereon, the parties each accept the provisions of this TASK ORDER NO. 14, and authorize the Consultant to proceed at the direction of the City's representative, in accordance with the SCOPE OF SERVICES AND FEE PROPOSAL.

Witness:

STROUD ENGINEERING CONSULTANTS, INC.

Brent A. Heath, President

3/28/22

Date

Attest:

CITY OF NEW PORT RICHEY, FLORIDA

City Clerk

Mayor

Date