March 28, 2023

Mr. Albert English Public Works Director Town of Eatonville 307 East Kennedy Blvd Eatonville, Florida 32751



RE: Town of Eatonville - Master Water and Wastewater Plans

Dear Albert:

The Town has met with CPH to discuss the need for master plans for both water and wastewater facilities. The master plans will help with developed and listing projects for the capital Improvement program (CIP).

The Master Water Plan will utilize information currently being collected and reviewed for the Town's Water Supply Facilities Work Plan

In addition, the Town currently has an agreement with the City of Altamonte Springs to send all the wastewater generated by the Town's residents and services area to Altamonte Spring's existing wastewater treatment facility (WWTF). Altamonte Springs previously mentioned that their WWTF is reaching the treatment capacity and the Town may need to look at other options for their wastewater flows. The master wastewater plan will include that consideration.

Hence, the purpose of this proposal is to provide a scope of engineering services related to preparing Master Water and Wastewater Plans. The master plans are intended to be used as a basis of planning for current and future infrastructure improvements, including providing a five-year CIP. The master plans will cover a 20-year utility planning horizon, with a year-end in 2043.

A detailed scope of services is provided in **Exhibit A.** CPH proposes to perform the services for the Master Water Plan for a lump sum fee of **\$37,350.00**, and the Master Wastewater Plan for a lump sum fee of **\$40,250.00**. The total lump sum fee of the project will **\$77,600.00**.

This proposal is being submitted in accordance with the MASTER *AGREEMENT FOR CONTINUING PROFESSIONAL SERVICES* dated <u>January 19, 2022</u>, between the Town of Eatonville (TOWN) and the firm of CPH, Inc., (CPH).

If the Town is in agreement with this proposal, then please have the Town Mayor sign the attached signature page for authorization to proceed with the described work.

As always, CPH appreciates this opportunity to provide our services to the Town.

Sincerely, CPH, LLC

Scott A. Breitenstein, P.E. Vice President/Associate



ALL TERMS AND CONDITIONS OF THE MASTER AGREEMENT ARE HEREBY INCORPORATED HEREIN. IN THE EVENT THAT THE LANGUAGE OF THIS PROPOSAL IS CONSTRUED TO BE IN CONFLICT WITH THE LANGUAGE IN THE MASTER AGREEMENT, THE LANGUAGE OF THE MASTER AGREEMENT SHALL CONTROL.

Made and executed by and between the Town and the CPH on this EXECUTED date HEREIN.

Town:
TOWN OF EATONVILLE, a Florida municipal corporation
Ву:
Angie Gardner Title: Mayor
DATE:
Consultant:
CPH, LLC,
By: LuttA.B.T.
Scott A. Breitenstein, P.E.

Title: Vice President/Associate



EXHIBIT A

SCOPE OF SERVICES



TOWN OF EATONVILLE MASTER WATER AND WASTEWATER PLANS

SCOPE OF SERVICES EXHIBIT "A"

PROJECT DESCRIPTION

The Town of Eatonville has requested CPH to prepare Master Water and Wastewater Plans for a 20-year planning horizon. The master planning effort is necessary at this time because of the significant growth related residential and commercial development in their service area. CPH will assist the Town with developing a five-year capital improvement program (CIP) that will be included in master plans. The 20-year planning horizon will end in 2043.

TASK 1 - Master Water Plan

CPH will have a kick-off meeting to discuss the project and deliverables. Additional work items are as follows:

- CPH will coordinate with the Town's planning department to establish the existing and future water service area boundaries and will help develop population growth projections for the 20-year planning period. CPH will request any information that the Town may have for other growth projections.
- CPH shall visit all existing water facilities with Town Staff. The "Plan" will describe the evaluation of all components such as water main sizing, water plant condition, wells, storage and pumping facilities and tabulate existing capacities, while assessing condition and useful life. Pictures of the treatments, storage and pumping components will be taken and included in the plan.
- CPH will establish design criteria for water supply, treatment system(s), water storage and high service
 pumping consistent with the Florida Department of Environmental Protection (FDEP) rules, and current
 Town practices.
- CPH will compute and tabulate total water system flows including average day and maximum day flows over the past five (5) years. Using this data and the documented service connections for the same time period, the per capita water usage (gpcd) will be computed. Current US Census data for the Town of Maitland will be reviewed and used as necessary.
- CPH will evaluate average day and max-day flow conditions relative to peak hourly demands for peaking
 factors and ascertain appropriate fire flow requirements plus max-day flow as determined form the
 MORs. Fire hydrant flow testing data will be requested and evaluated.
- CPH will evaluate existing and proposed raw water (well) sources considering quality and quantity. Review available data on geology, hydrogeology and area water quality and evaluate potential long-term use of existing well fields considering possible quality degradation, and excessive aquifer drawdown.
- FDEP design treatment and capacity criteria established in Chapter 62-555, FAC, will be reviewed based on requirements, and recommendations on improvements will be developed.
- CPH will obtain from the Town all available documents in electronic format, including GIS maps of the
 existing water distribution system. Our fee includes time to coordinate with the Town on updating the
 existing GIS maps. The updated figures/maps will include information such as property parcels, water
 bodies, township and section, Town limits, and other available information. The GIS maps will include
 labeling lakes, streets, service boundaries, and the piping network of the water distribution system.



- Once the GIS base map is received from the Town, and updated, CPH will develop a WaterCAD hydraulic model. The hydraulic model will be used to assist in evaluating the operation of the Town's water facilities and existing water distribution system. The computer model will be calibrated with all available data, including fire flow testing, so that when it is run it will simulate the existing system operation under similar flow demand as programmed. Future flow conditions will be simulated in five-year increments through the 2043 planning horizon.
- The hydraulic modeling will be run with several operating scenarios, including the current and projected peak flow demands. CPH will provide recommendations on necessary water system improvements relative to proper engineering criteria, and the results for the modeling scenario analyses.
- CPH will prepare a map, which shows the recommended improvements (new proposed water lines) for the distribution system.
- CPH will study and analyze expansion capabilities of existing facilities, as it relates to capacity requirement for the next 20-years, including the need for additional water plant and/or storage locations capable of servicing the water needs of the immediate and overall service area.
- CPH will recommend a staged implementation of the water treatment plant(s), and distribution system improvements, to show construction of various system components for the five (5), 10 and 20-year needs.
- CPH will prepare planning level project cost estimates for staged implementation of the plan for five (5), 10 and 20-year needs, as necessary.
- CPH will submit up to four (4) copies of the draft Master Water Plan to Town that will include descriptions, text, charts, graphics, existing and future water system maps, WTPs site plans, and other figures as needed for review and comment. CPH will meet with the Town to address any comments.
- CPH will revise and submit for the Town's records a "signed and sealed" 2023 Master Water Plan and will make available in electronic format the Mater Water Plan, and associated information including GIS maps.

TASK 2 - Master Wastewater Plan

CPH will have a kick-off meeting to collect and review pertinent data and reports related to the existing lift stations, including the collection and transmission system, and additional sewer service connection data for the last five (5) years. Additional work items are as follows:

- CPH will coordinate with the Town on sewer population projections for the next 20 years, as related to
 the populations established in the Water Supply Facility Work Plan. As the Town knows, there are areas
 in the Town's service area that are on septic tank systems, so the sewer population is not the same as
 the water population. The Plan will include a discussion on centralized sewer and a connection program
 of the septic tank systems and the potential change in future flows. A map of the areas will be provided.
- CPH shall meet with Town staff to discuss all available information noted above and will provide in the Plan a description of the existing collection/transmission system, lift stations, and facility capacities from the information provided by the Town, and from past CPH work. Town's current agreement with the Town of Altamonte Springs will be reviewed and discussed with the Town related to future potential growth.



- CPH will visit selected lift stations (Vereen L/S) as coordinated with Town Staff. CPH will develop with Staff critical lift station needs, and problem areas, and prepare a map of the lift station locations.
- CPH will obtain from the Town, in electronic format, maps of the existing wastewater distribution system, including the Town's GIS maps with information on property parcels, water bodies, township and section, Town limits, and other available information. CPH will update GIS maps to include labeling lakes, streets, service boundaries, and the piping network of the wastewater distribution system.
- CPH will refine the staged implementation of the CIP, as essential, to show construction of various system components for the five (5), 10, 20-year needs. The associated planning project cost estimates will be provided for the stated years. CPH will prepare a map, which shows the recommended improvements for the collection and transmission system, as necessary.
- CPH will submit up to four (4) copies of the draft Master Wastewater Plan to Town that will include descriptions, text, charts, graphics, existing and future water system maps, WWTFs site plans, and other figures as needed for review and comment. CPH will meet with the Town to address any comments.
- CPH will revise and submit for the Town's records a final "signed and sealed" 2023 Master Water Plan and will make available in electronic format the Mater Wastewater Plan, and associated information including GIS maps.

Deliverables:

- 1. Master Water Plan
- 2. Master Wastewater Plan

COMPENSATION

Compensation paid to CPH for services described herein and rendered by principals and employees assigned to the project are computed by multiplying Standard Classification Billing Rates for all classifications of employees directly engaged on the project, times the number of hours worked on the project.

The Engineering lump sum fee for the services described herein is estimated to be **\$77,600.00**, with the Master Water Plan lump sum fee at **\$37,350.00**, and the Master Wastewater Plan lump sum fee at **\$40,250.00**.

The lump sum fee includes out-of-pocket expenses and will be specifically identified in periodic invoicing, and include such items as transportation and subsistence of principals and employees when traveling in connection with the project, tolls, telephone calls, photocopies, prints and plots, etc. Invoices will be submitted periodically, indicating the hours expended during that billing cycle.