TASK ORDER APPROVAL FORM

CONTRACT #: C22-3249-WS

TASK ORDER #: 20 CONTRACT: C22-3249-WS Ardurra Group, Inc. TASK ORDER AMOUNT: \$48,000.00 **General Eng Services for WS** OFFERED BY CONSULTANT: EXPIRES:09/30/2025 w/2 1 yr renewals ARDURRA GROUP, INC. FIRM'S NAME JOSEPH G. CREWS, P.E. REPRESENTATIVE'S PRINTED NAME 5/14/25 Southeast Water Practice Director APPROVED BY OKALOOSA CLIENT **RECOMMENDED FOR APPROVAL** (Department Director) (Per Purchasing Manual) Michael Hackett DeRita Mason, PURCHASING MANAGER Michael Hackett **WATER & SEWER DIRECTOR** TITLE DATE Faye Douglas OMB DIRECTOR (if applicable) DATE Paul Mixon John Hofstad CHAIRMAN (if applicable) CLIENT ADMINISTRATOR (if applicable) DATE DATE Revised January 21, 2020

Scope of Basic Services to Provide Professional Engineering Consulting Services for the APWRF RIBS Capacity Expansion Analysis Project

Article A. Purpose:

The purpose of this Task Order is to authorize and direct Ardurra Group (CONSULTANT) to proceed with professional engineering consulting services for the APWRF RIBS Capacity Expansion Analysis Project (PROJECT) for the Okaloosa County Water and Sewer Department (COUNTY).

For planning purposes, COUNTY wants to know how much additional treated wastewater can be disposed of in the Arbennie Pritchett WRF's network of RIBs. This PROJECT include using the ground water model developed at site inception in 2005 to forecast the site's ability to accept 10 mgd effluent across the network of 18 RIBs (132 acres). The proposed approach would be to field verify the model and adjust as needed to forecast maximum loading capacity. In the process of model verification, data collected during operation of the system will be input into the model to see how well the model represents the observed mounding. If the simulated mounding adequately matches the observed mounding, then the model may be assumed suitable for a prediction of maximum loading. If not, adjustments to the model are made until it is suitable. This Task Order provides authorization to CONSULTANT to perform the service to develop a APWRF RIBS Capacity Analysis Project. The activities that are included in this task order are described in "Article B. Scope of Services."

Article B. Base Scope of Services:

The CONSULTANT agrees to furnish general professional engineering and technical services for the work required to collect information and data, evaluate and analyze data, and prepare final report documents. The PROJECT includes the services required to develop the APWRF RIBS Capacity Expansion Analysis Project for the COUNTY. The specific Engineering Services that CONSULTANT agrees to furnish to the COUNTY for the PROJECT and the Specific Work Tasks are presented below.

- Preliminary Groundwater Mounding Modeling
- Capacity Analysis Evaluation
- Preliminary Permitting Coordination Assistance

Detailed descriptions of the scope of services that are proposed for this task order are presented below.

Work Task 1—Preliminary Groundwater Mounding Modeling and Capacity Analysis Evaluations

Work Task 1 involves the professional engineering services required to collect and review existing information and data required to perform assessments of the COUNTY's existing systems; to evaluate the original model and verify results using updated software and additional field testing.

1.1 Preliminary Groundwater Mounding and Capacity Analysis

CONSULTANT shall coordinate with the COUNTY to identify and collect information and data, including electronic data, regarding the COUNTY'S APWRF flows and groundwater monitoring data. Run new mounding analysis models utilizing previous models with current data to validate previous assumption. Create predictive simulations to estimate how much loading the existing site can absorb. This information may include:

- Coordinate with COUNTY staff the acquisition of historical RIB operational data
- Review historical information for existing groundwater monitoring wells and surface water analysis
- Make site visit (including former FWB and Ok. Co. Wright LF) to assess current conditions
 and verify changes to aquifer stresses since last modeling in 2005; identify wells still
 available for use in the current analysis; make site walkover with operator and discuss
 operation and performance of the system
- Develop testing plan as it will coordinate with COUNTY on data collection assistance
- Document mounding from RIB loading for one month (one month is selected so that the loading cycle can go through a couple of iterations to measure accumulation)
- Utilize existing monitoring wells for the analysis; at least nine wells are available for water level measurements; rent and install nine automated data loggers with pressure transducers for collection of water levels
- Coordinate with COUNTY staff to assist by noting loading times and rates and recording water levels in RIBs using a simple staff gauge.
- Retrieve loading records and water levels for past few years (by COUNTY)
- Assimilate with current test data; construct hydrographs and ground water flow maps needed for ground water modeling.
- Develop preliminary RIB application rates including resting/loading schedule
- Conduct ground water modeling
- Translate previous model to current software and validate successful translation by repeating the calibration run
- Make changes as needed to account for changes in stresses to the aquifer that have occurred
 over the years (e.g., the City of FWB sprayfield, Wright LF, etc...)
- Provide a technical memorandum to the COUNTY for in-house use and decision making.
 Memorandum to include discussion of activities, findings, and recommendations along with maps and model output

1.2 Preliminary FDEP Permitting Assistance

CONSULTANT shall coordinate with the Florida Department of Environmental Protection (FDEP) to determine necessary documents to apply for a revised permit for increasing the disposal capacity of the existing rapid infiltration basins (RIBS).

• CONSULTANT shall coordinate and attend preliminary coordination workshops with FDEP. The purpose of the workshops will be to develop an understanding of the specific

- regulatory requirements and the review procedures to be used to implement rerating the existing RIB system if available
- CONSULTANT shall conduct coordination meetings with the various divisions within
 FDEP providing permitting requirements, including update mounding analysis run reports,
 data and monitoring requirements. This information will be utilized for future submittal by
 the COUNTY if the preliminary modeling analysis allows for increased capacity and
 rerating of the existing RIBs.

Additional Scope Items

The following services are not included as part of this base scope of services and would be performed only as authorized by the COUNTY. Authorization to proceed would be in the form of a written authorization from COUNTY.

- Formal Presentations
- Collection/Transmission System Power Outage Contingency Plan
- Meetings with others not identified in this scope of services
- Additional draft versions of the report

Article C. Compensation Provisions:

As compensation for providing the services described in this Task Order, CLIENT shall pay CONSULTANT in accordance with Section 7 of the Agreement.

The Total Budget Ceiling for this Task Order is \$48,000.00. A breakdown of the budget ceilings for this Task Order is presented in Table C.1., below:

Work Task Description	Work Task Cost Amounts	Compensation Method
Preliminary Groundwater Mounding Modeling and Capacity Analysis Evaluations	\$48,000	Lump Sum
Total Overall Budget Ceiling	\$48,000	

CONSULTANT will keep CLIENT informed of progress so that the Total Overall Budget Ceiling and/or work effort can be adjusted if found necessary. CONSULTANT is not obligated to incur costs beyond the indicated Total Overall Budget Ceiling, as may be adjusted, nor is CLIENT obligated to pay CONSULTANT beyond these limits. The Scope and Total Overall Budget Ceiling for this Task Order can be increased with an Authorized Revision to this Task Order when executed by both parties. When any amount has been increased, CONSULTANT's excess costs expended prior to such an increase will be allowable to the same extent as if such been incurred after the approved increase.

Article D. Period of Service:

The schedule for the Project within this Task Order is as follows:

Authorization to Proceed Termination of Task Order

Upon Full Execution by the CLIENT Upon Completion of the Project

Article E. Authorized Representatives:

The Authorized Representatives designated below are authorized to act concerning this Task Order. Communications between the parties shall be through the Authorized Representatives:

For CLIENT	For CONSULTANT	
Name: Michael Hackett, Director	Name: Joseph G. Crews, PE, Southeast Water Dir.	
Michael Hackett Digitally signed by Michael Hackett DN: cn=Michael Hackett, o=Board of County Commissioners, cue-Water and Sewer. email=mhackettetpmokalooaa.com, c=US Date: 2025.05.14 14:37:17 -05:00*	Messe D. Cem 05/14/25	
signature date	signature date	
Address:	Address:	
1804 Lewis Turner, Blvd., Ste 300	1988 Lewis Turner Boulevard	
Fort Walton Beach, FL 32547	Fort Walton Beach, FL 32547	
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***** End *****