

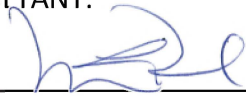
## ENGINEERING SERVICES WORK ORDER 02

This Work Order Number 02 is entered into as of this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, pursuant to that certain Continuing Contract Agreement, dated May 2, 2023, ("Agreement"), by and between INDIAN RIVER COUNTY, a political subdivision of the State of Florida ("COUNTY") and Arcadis, U.S., Inc. ("Consultant").

The COUNTY has selected the Consultant to perform the professional services set forth on Exhibit A (Scope of Work), attached to this Work Order and made part hereof by this reference. The professional services will be performed by the Consultant for the mutually agreed upon lump sum or maximum amount not-to-exceed professional fee. Any additional costs must be approved in writing, and at a rate not to exceed the prices set forth in Exhibit B of the Agreement (Rate Schedule) for RFQ 2023015, made a part hereof by this reference. The Consultant will perform the professional services within the timeframe more particularly set forth in Exhibit A (Time Schedule), attached to this Work Order and made a part hereof by this reference all in accordance with the terms and provisions set forth in the Agreement. Pursuant to paragraph 1.4 of the Agreement, nothing contained in any Work Order shall conflict with the terms of the Agreement and the terms of the Agreement shall be deemed to be incorporated in each individual Work Order as if fully set forth herein.

IN WITNESS WHEREOF, the parties hereto have executed this Work Order as of the date first written above.

CONSULTANT:

By:   
Name: Melissa L. Pomales, PE  
Title: Senior Vice President

BOARD OF COUNTY COMMISSIONERS OF  
INDIAN RIVER COUNTY:

By: \_\_\_\_\_  
Joseph E. Flescher, Chairman

BCC Approval Date: \_\_\_\_\_

By: \_\_\_\_\_  
John A. Titkanich, Jr., County Administrator

Approved as to Form and Legal Sufficiency:

By: \_\_\_\_\_  
Christopher A. Hicks, Assistant County Attorney

Ryan L. Butler, Clerk of Court and Comptroller

Attest: \_\_\_\_\_  
Deputy Clerk

(SEAL)

# **ATTACHMENT A SCOPE OF SERVICES**

## **CONSULTING SERVICES FOR COMPUTERIZED MAINTENANCE MANAGEMENT SYSTEM IMPLEMENTATION SUPPORT SERVICES IRCDUS Project ID: 00.23.541**

### **1 OVERVIEW**

#### **Background**

Indian River County (COUNTY) is evaluating the implementation of OpenGov Cartegraph Asset Management to replace the existing SEMS computerized maintenance management system (CMMS). The COUNTY has requested a proposal from Arcadis U.S., Inc. (CONSULTANT) to provide consulting services to update the desired functional and technical requirements and develop an implementation plan while providing additional oversight and subject matter expertise for the implementation of a fully functional CMMS.

The proposed work will be authorized as a work order under the existing Continuing Contract Agreement, between the COUNTY and CONSULTANT, dated May 2, 2023. The terms and conditions of the referenced Contract apply.

### **2 SCOPE OF WORK**

CONSULTANT proposes the following four tasks:

1. Establish the CMMS functional and technical requirements and required supporting data.
2. Produce a requirements script and facilitate the demonstration by OpenGov or qualified 3<sup>rd</sup> party implementor (IMPLEMENTOR) to verify that Cartegraph meets COUNTY needs.
3. Create the Phase 1 implementation scope, assuming Cartegraph meets COUNTY needs.
4. Allowance for additional services that will only be authorized if Cartegraph is implemented for Phase I.

#### **Task 1 – CMMS Readiness Review**

Building on prior work that CONSULTANT performed for the COUNTY in 2021 to develop the required functional and technical specifications for the procurement of a replacement CMMS, CONSULTANT shall provide the following services to prepare the COUNTY for the implementation of a CMMS.

1. Update Requirements
  - Review the current requirements originally created in 2021 by CONSULTANT, and update and validate with the COUNTY.
2. Revisit the requirements table for completeness and match the needs of current SEMS users and work and asset management best practices.
  - Determine priority of each requirement (“Must Have”, “Nice to Have”).

- Determine any gaps between original requirements and fit for the COUNTY.
- 3. GIS configuration for Cartegraph and Asset Management.
  - Profile and analyze existing key datasets necessary for CMMS implementation.
  - Identify missing, inconsistent, or potentially erroneous GIS data needed to support work and asset management.
- 4. Review vertical asset hierarchy needed to support work and asset management.

**Deliverables:**

- Four (4) in-person/virtual meetings with the COUNTY to update CMMS prioritized requirements.
- Linear and vertical asset recommendations for CMMS readiness.
- Combination virtual and in person workshop to discuss the readiness findings and recommendations.

**Assumptions:**

- COUNTY will provide CONSULTANT with required GIS data and vertical asset data
- No fieldwork is included, all work will be office based and based on provided data.

## **Task 2 – Develop and Facilitate Scripted Demos**

After revisiting the CMMS requirements and confirming them with the COUNTY, the CONSULTANT shall develop up to fifteen (15) scripts for key use cases and scenarios for the COUNTY. These can include typical work order creation, completion, and reporting activities, as well as inventory management tasks, creation of new asset information, condition and risk assessments, and triggering automated tasks to help the COUNTY work more efficiently. Under this task, the CONSULTANT proposes the following activities:

1. Develop scenario-based demo scripts for review and approval by the COUNTY.
2. Facilitate one on-site meeting with the IMPLEMENTOR to run through the demonstration scripts. Up to four follow up virtual meetings with IMPLEMENTOR for clarifications.
3. Assist the COUNTY with evaluating the demos and how well they align with the intended use cases and system requirements.
4. Summarize the demonstration findings in a memo to the COUNTY offering recommendations on pros and cons and the functionality of implementing Cartegraph and suggested next steps.

**Deliverables:**

- Draft demo scripts for COUNTY review.
- Final demo scripts that incorporate COUNTY recommended changes.
- Demonstration summary memo with recommendations to proceed with Cartegraph or to evaluate other options.

**Assumptions:**

- One six-hour CMMS demonstration will be held at a COUNTY facility and be attended in person by two CONSULTANT employees.
- All follow-up meetings will be virtual as needed for clarifications.

### Task 3 – Implementation Scoping and Phase I Detailed Planning

Assuming the COUNTY chooses to proceed with the Cartegraph implementation after the demos, Task 3 will begin immediately to help ensure a well-planned implementation and a clear path to success. The IMPLEMENTOR will be responsible for performing the scope as developed by the CONSULTANT in this task. The resulting Implementation Plan will be used by the COUNTY to negotiate the scope, cost, and schedule for actual implementation by the IMPLEMENTOR.

Under this task, the CONSULTANT proposes the following activities to define the phases of implementation:

1. Define overall phasing by asset types and goals for successful CMMS implementation.
2. Develop "to-be" process mappings for up to 20 processes including preventive maintenance, corrective maintenance, and inspections for linear and vertical assets.
3. Work with the IMPLEMENTOR to identify all Cartegraph CMMS modules required to meet the functionality desired by the COUNTY for all phases of implementation.
4. Define the Phase 1 scope of implementation.
5. Recommend Testing Plan and training to be performed by the IMPLEMENTOR.
6. Recommend system acceptance criteria.
7. Review IMPLEMENTOR cost and schedule and advise COUNTY on potential refinements that may be needed to comply with the intent.

#### **Deliverables:**

- Draft and Final Implementation Plan Memo documenting the asset types, phasing scheduled, required modules, and detailed implementation scope for Phase 1 and recommended testing plan, training, and system acceptance criteria.
- One in person workshop to present and discuss the Implementation Plan Memo.
- Eight virtual meetings to evaluate existing business processes while concurrently developing the "To Be" business processes.
- "To-Be" Business Process Diagrams for up to 20 processes.

### Task 4 – Allowance for Additional On-Call Assistance

This task provides for additional services that could include software selection if Cartegraph is not found to be an acceptable solution or Phase I implementation assistance. Activities to be performed by CONSULTANT include but are not limited to the following:

1. Alternate CMMS Selection
  - Draft RFQ based on the Task 1 requirements that the COUNTY can include within their standard procurement template.
  - Facility review and scoring of RFQ submission
  - Coordinate demonstrations (as defined in Task 2) for up to three of the highest scored CMMS products(optional)
2. Cartegraph Implementation assistance
  - Inventory Updates.

- GIS Schema Updates.
- Project Management Services.
- Additional business process development.
- Additional meeting facilitation with the COUNTY and IMPLEMENTOR.

Task 4 allowance will be a not to exceed value of \$50,000 that is authorized for use by the COUNTY to allow for rapid engagement of the CONSULTANT for these or other related services.

## 3 ASSUMPTIONS/EXCLUSIONS

The following lists the assumptions made by CONSULTANT in the development of this scope of services and the estimated consulting services fee for this project. Should the work of the project exceed these assumptions, the CONSULTANT may request additional fees.

1. The COUNTY will be able to provide remote desktop/VPN access if needed for the CONSULTANT when not on-site.
2. The COUNTY will provide a conference room for all in person meetings.
3. The COUNTY will be available to attend all virtual and live meetings in a timely manner and assist with scheduling COUNTY employees.
4. CONSULTANT has included project management efforts within each task.

## 4 Schedule

Tasks 1 and 2 can be completed within four months contingent on the IMPLEMENTOR responding in a timely manner. It is assumed all services can be completed in about 8 months; however, the schedule will be refined once the IMPLEMENTOR submits their schedule for Phase I services.

	2025							
	1	2	3	4	5	6	7	8
<b>Task 1 – EAMS Readiness Review</b>	x	x						
<b>Task 2 – Develop and Facilitate Scripted Demos</b>		x	x					
<b>Task 3 – Implementation Scoping and Phase 1 Detailed Planning</b>			x	x				
<b>Task 4 – Allowance for Additional on Call Assistance</b>					x	x	x	x

## 5 COMPENSATION AND METHOD OF PAYMENT

The compensation to be paid to the CONSULTANT for providing the scope of services described above will be on a time and material basis as described in the breakdown provided in the Attached Fee Schedule. A task summary is provided below:

Task	Not to Exceed Budget (Labor +ODCs)
<b>Task 1 – EAMS Readiness Review</b>	<b>\$79,716.13</b>
<b>Task 2 – Develop and Facilitate Scripted Demos</b>	<b>\$62,546.86</b>
<b>Task 3 – Implementation Scoping and Phase 1 Detailed Planning</b>	<b>\$85,722.35</b>
<b>Task 4 – Allowance for Additional on Call Assistance</b>	<b>\$47,574.53</b>
<b>Not-to-Exceed Total Budget</b>	<b>\$275,559.87</b>

The CONSULTANT may adjust the budget between tasks as needed and CONSULTANT reserves the right to substitute resources with others of equivalent experience and expertise. The allowance task will be used only after authorization is provided by the COUNTY's Project Manager. The CONSULTANT will submit invoices to the COUNTY's Project Manager for work performed during each calendar month. Invoicing will be accompanied by a brief description of the work completed during the billing period. **Table 1** provides a detail of hours and breakdown budget for this scope.

**Table 1 – Hours and Budget Breakdown**

Task #	Task Description	National Discipline Leader	Principal Engineer	Principal Engineer	Principal in Charge	Project Manager	Staff Engineer	Principal Engineer	Project Assistant	Total Hours	Total Expenses	Total Labor
<b>1</b>	<b>Task 1 – EAMS Readiness Review</b>	<b>32</b>	<b>4</b>	<b>10</b>	<b>116</b>	<b>58</b>	<b>76</b>	<b>22</b>	<b>8</b>	<b>326</b>		<b>\$79,716.13</b>
	EAMS review requirements	2	0	2	8	4	16	4	0	36		
	Requirements table review for completeness and needs SEMS	4	0	2	12	4	8	4	0	34		
	GIS configuration for Cartegraph and Asset Management.	4	0	0	10	0	0	4	0	18		
	Review existing vertical asset data & hierarchy for asset management	4	0	0	12	2	24	0	0	42		
	Internal coordination meetings	6	0	0	6	6	6	6	0	30		
	Client Workshop	3	0	0	20	6	6	0	0	35		
	Client Meetings - 4 two hour virtual/in person	6	2	0	40	23	0	0	0	71		
	Deliverables (ppt, minutes, recommendations memo)	3	0	6	8	3	16	4	0	40		
	PM	0	2	0	0	10	0	0	8	20		
<b>2</b>	<b>Task 2 – Develop and Facilitate Scripted Demos</b>	<b>13</b>	<b>7</b>	<b>12</b>	<b>75</b>	<b>21</b>	<b>90</b>	<b>27</b>	<b>8</b>	<b>253</b>	<b>\$5,280.00</b>	<b>\$57,266.86</b>
	Develop scenario-based demo scripts (develop up to 15 scripts )	2	0	4	20	0	20	4	0	50		
	Facilitate one on-site meeting with the IMPLEMENTOR	0	0	0	16	0	16	0	0	32		
	4 follow up virtual meetings	0	0	0	8	0	8	4	0	20		
	Assist the COUNTY with evaluating the demos	1	0	0	6	0	8	4	0	19		
	Develop a memo of demonstration findings	2	0	4	8	2	16	4	0	36		
	Internal coordination meetings	3	0	0	6	6	6	3	0	24		
	Additional Client Meetings	3	3	0	3	3	0	0	0	12		
	Deliverables (ppt, minutes, recommendations memo, demo scripts)	2	0	4	8	2	16	8	0	40		
	PM	0	4	0	0	8	0	0	8	20		
<b>3</b>	<b>Task 3 - Implementation Scoping and Phase I Detailed Planning</b>	<b>31</b>	<b>4</b>	<b>40</b>	<b>76</b>	<b>38</b>	<b>134</b>	<b>27</b>	<b>8</b>	<b>358</b>	<b>\$5,280.00</b>	<b>\$80,442.35</b>
	Develop implementation memo draft & final	4	0	4	24	2	40	16	0	90		
	Internal coordination meetings	3	0	0	6	6	6	3	0	24		
	Client Workshop - In person - present the Implementation Memo	8	0	0	36	16	12	0	0	72		
	Meetings to develop the "To Be" business processes (up to 8 1-hr virtual)	4	0	16	2	0	16	4	0	42		
	Deliverables (ppt, minutes, implementation memo, 15 "to be" processes )	12	0	20	8	4	60	4	0	108		
	PM	0	4	0	0	10	0	0	8	22		
<b>4</b>	<b>Task 4 - Allowance for Additional On-Call Assistance</b>	<b>10</b>	<b>4</b>	<b>20</b>	<b>52</b>	<b>17</b>	<b>70</b>	<b>28</b>	<b>7</b>	<b>208</b>		<b>\$47,574.53</b>
	<b>Total Hours</b>	<b>86</b>	<b>19</b>	<b>82</b>	<b>319</b>	<b>134</b>	<b>370</b>	<b>104</b>	<b>31</b>	<b>1145</b>		
	Billable Rate	\$350.00	\$292.32	\$298.00	\$304.10	\$215.52	\$123.65	\$287.78	\$107.90			
	<b>Total</b>	<b>\$30,100.00</b>	<b>\$5,554.08</b>	<b>\$24,436.00</b>	<b>\$97,006.62</b>	<b>\$28,879.68</b>	<b>\$45,749.76</b>	<b>\$29,928.70</b>	<b>\$3,345.02</b>		<b>\$10,560.00</b>	<b>\$264,999.87</b>
										<b>Grand Total</b>		<b>\$275,559.87</b>