### AGREEMENT 20021 FOR ENGINEERING SERVICES PER SOI#20022

This AGREEMENT is entered into by and between Lake County (County) and Donohue & Associates, Inc., 230 W. Monroe Street, Suite 2925, Chicago IL 60606 (hereafter "Engineer").

### RECITALS

WHEREAS, Lake County is seeking an Engineer to provide Engineering services for PW#2020.062 Remote Site SCADA Project as described in Attachment A; and

WHEREAS, the Engineer is a professional provider of Engineering services; and

NOW, THEREFORE, Lake County and the Engineer AGREE AS FOLLOWS:

### SECTION 1. AGREEMENT DOCUMENTS

This AGREEMENT constitutes the entire agreement between the County and the Engineer.

### SECTION 2. SCOPE OF SERVICES

The Engineer shall provide engineering services described in Attachment A.

### **SECTION 3. DURATION**

The work shall be completed within 100 days after execution of this Agreement.

## **SECTION 4. INDEMNIFICATION**

The Engineer agrees to indemnify, save harmless and defend the County, their agents, servants, and employees, and each of them against and hold it and them harmless from any and all lawsuits, claims, demands, liabilities, losses and expenses, including court costs and attorney's fees, for or on account of any injury to any person, or any death at any time resulting from such injury, or any damage to property, which may arise or which may be alleged to have arisen out of Engineer's negligent acts in connection with the services covered by this Agreement. The foregoing indemnity shall apply except if such injury, death or damage is caused directly by the willful and wanton conduct of the County, their agents, servants, or employees or any other person indemnified hereunder.

## **SECTION 5. INSURANCE**

The Engineer must obtain, for the Contract term and any extension of it, insurance issued by a company or companies qualified to do business in the State of Illinois and provide the County with evidence of insurance. Insurance in the following types and amounts is necessary:

- Worker's Compensation Insurance covering all liability of the Engineer arising under the Worker's Compensation Act and Worker's Occupational Disease Act at statutory limits.
- **Professional Liability** to include, but not be limited to, coverage for Errors and Omissions to respond to claims for loss there from.
  - o General Aggregate Limit \$3,000,000
  - o Each Occurrence Limit \$1,000,000
- Automobile Liability:
  - o Bodily Injury, Property Damage (Each Occurrence Limit) \$1,000,000

Engineer agrees that with respect to the above required Automobile Liability insurance, Lake County shall:

- Be named as additional insured by endorsement to the extent of the negligence of the Engineer;
- Be provided with thirty (30) days notice, in writing, of cancellation of material change;
- Be provided with Certificates of Insurance evidencing the above required insurance, prior to commencement of this Contract and thereafter with certificates evidencing renewals or replacements of said policies of insurance at least fifteen (15) days prior to the expiration of cancellation of any such policies. Forward Notices and Certificates of Insurance to: Lake County Central Services, 18 N. County St, Waukegan, IL 60085-4350.

### SECTION 6. AGREEMENT PRICE

Lake County will pay to the Engineer the amount not to exceed \$69,680.

### **SECTION 7. INVOICES & PAYMENT**

Invoices may be submitted for work performed on a monthly basis based upon the percent of work completed in the amount not-to-exceed in Section 6. Submit invoice(s) detailing the services provided. Payments shall be made in accordance with the Local Government Prompt Payment Act.

Engineer will address Invoices to:

Lake County Department of Public Works 650 Winchester Road Libertyville, IL 60048-1391 Attn: Daniel Salgado

County will make Payments to:

Donohue & Associates, Inc. 3311 Weeden Creek Road Sheboygan, WI 53081-8489

### SECTION 8. STATEMENT OF OWNERSHIP

The drawings, specifications and other documents prepared by the Engineer for this Project are the property of the County, and Engineer may not use the drawings and specifications for any purpose not relating to the Project without the County's consent, except for the Engineer's services related to this Project. All such documents shall be the property of the County who may use them without Engineer's permission for any current or future Lake County project; provided, however, any use except for the specific purpose intended by this Agreement will be at the County's sole risk and without liability or legal exposure to the Engineer.

The Engineer shall retain its copyright and ownership rights in its design, drawing details, specifications, data bases, computer software, and other proprietary property. Intellectual property developed, utilized, or modified in the performance of the services shall remain the property of the Engineer.

## **SECTION 9. TERMINATION**

The County reserves the right to terminate this Agreement, or any part of this Agreement, upon thirty (30) days written notice. In case of such termination, the Engineer shall be entitled to receive payment from the County for work completed to date in accordance with terms and conditions of this Agreement. In the event that this Agreement is terminated due to Engineer's default, the County shall be entitled to contract for consulting services elsewhere and charge the Engineer with any or all losses incurred, including attorney's fees and expenses.

### SECTION 10. SCHEDULE

The Engineer shall submit for the County's approval a schedule for the performance of the Engineer's services which may be adjusted as the Project proceeds, and shall include allowances for periods of time required for the County's review and for approval of submissions by authorities having jurisdiction over the Project. Time limits established by this schedule approved by the County shall not, except for reasonable cause, be exceeded by the Engineer or County.

## **SECTION 11. CONSTRUCTION COST**

The Construction Cost shall be the total cost or estimated cost to the County of all elements of the Project designed or specified by the Consultant.

The Construction Cost shall include the cost at current market rates of labor and materials furnished by the Contractor and equipment designed, specified, selected or specially provided for by the Agreement Documents, plus a reasonable allowance for the Contractor's overhead and profit. The Construction Cost shall include the cost of building code compliance, permits, and fees. In addition, a reasonable allowance for contingencies shall be included for market conditions at the time of bidding and for changes in the Work during construction.

Construction Cost does not include the compensation of the Consultant and Subconsultants, the costs of the land, rights-of-way, financing or other costs that are the responsibility of the County.

If a fixed limit of Construction Cost is exceeded by the lowest bon a fide bid or negotiated proposal, the County shall:

- give written approval of an increase in such fixed limit;
- authorize re-bidding or renegotiating of the Project within a reasonable time;
- abandon project and terminate the Architect Agreement; or
- Cooperate with Engineer in revising Project scope and quality as required to reduce Construction Cost.

If the County chooses to revise the project scope, the Engineer, without additional charge, shall modify the Agreement Documents as necessary to comply with the fixed limit.

## SECTION 12. JURISDICTION, VENUE, CHOICE OF LAW

This Agreement shall be governed by and construed according to the laws of the State of Illinois. Jurisdiction and venue shall be exclusively found in the 19<sup>th</sup> Judicial Circuit Court, State of Illinois.

## **SECTION 13. INDEPENDENT CONTRACTOR**

The Engineer is an independent contractor and no employee or agent of the Engineer shall be deemed for any reason to be an employee or agent of the County.

## **SECTION 14. WARRANTS**

The Engineer represents and warrants to the County that none of the work included in this contract will in any way infringe upon the property rights of others. The Engineer shall defend all suits or claims for Engineer's infringement of any patent, copyright or trademark rights and shall hold the County harmless from loss on account thereof.

### **SECTION 15. ASSIGNMENT**

Neither the Engineer nor the County shall assign any duties of performance under this Agreement without the express prior written consent of the other.

### SECTION 16. MODIFICATION

This Agreement may be amended or supplemented only by an instrument in writing executed by the party against whom enforcement is sought.

### **SECTION 17. DISPUTE RESOLUTION**

All issues, claims, or disputes arising out of this Agreement shall be resolved in accordance with the Appeals and Remedies Provisions in Article 9 of the Lake County Purchasing Ordinance.

### SECTION 18. NO IMPLIED WAIVERS

The failure of either party at any time to require performance by the other party of any provision of this Agreement shall not affect in any way the full right to require such performance at any time thereafter. Nor shall the waiver by either party of a breach of any provision of this Agreement be taken or held to be a waiver of the provision itself.

### **SECTION 19. SEVERABILITY**

If any part of this Agreement shall be held to be invalid for any reason, the remainder of this Agreement shall be valid to the fullest extent permitted by law.

## **SECTION 20. CHANGE IN STATUS**

The Engineer shall notify the County promptly of any change in its status resulting from any of the following: (a) vendor is acquired by another party; (b) vendor becomes insolvent; (c) vendor, voluntary or by operation law, becomes subject to the provisions of any chapter of the Bankruptcy Act; (d) vendor ceases to conduct its operations in normal course of business. The County shall have the option to terminate this Agreement with the Engineer immediately on written notice based on any such change in status.

### **SECTION 21. DELIVERABLES**

The Engineer shall provide deliverables as identified in Attachment A.

IN WITNESS HEREOF, the undersigned have caused this Agreement to be executed in their respective names on the dates hereinafter enumerated.

Lake County:

Donohue & Associates, Inc.

230 W. Monroe Street, Suite 2925

Chicago, IL 60606

RuthAnne Hall

Purchasing Director

Lake County Purchasing

Date: 7 16 2020

Eric Cockerill Vice President

Date: 6/3/2020

### Attachment A

# AGREEMENT 20021FOR ENGINEERING SERVICES PER SOI #20022

### REMOTE SITE SCADA NETWORK PROJECT

### PART I

## PROJECT DESCRIPTION/SCOPE OF SERVICES/TIMING

### A. PROJECT DESCRIPTION

The intent of this project is to assist Lake County Public Works (LCPW) with the Design and Implementation of SCADA network for the Southeast and former Lakes Region Sanitary District remote sites.

Lake County Public Works Department (LCPW) provides wastewater conveyance and treatment services to approximately 40% of the residential, commercial, and industrial customers in Lake County. LCPW owns and operates three treatment facilities and over 345 miles of sewer system. LCPW solicited qualifications from engineering firms to provide detailed planning, design, and systems integration for SCADA telemetry networking to service the Southeast region and former Lakes Region Sanitary District remote sites. Lift stations in the Southeast region are not currently connected to the network. The Lakes Region Sanitary District was recently acquired and serves the areas of Lake Villa, Ingleside, and portions of Round Lake and Volo.

The overall project includes Planning, Design, and Implementation of control system upgrades in the Southeast Region (28 sites) as well as the former Lakes Region (20 sites) and their respective telemetry hubs. In order to effectively evaluate and provide accurate costs for the associated improvements, the overall project will be broken into three phases as shown below.

- Phase 1 Site Investigation and Planning
- Phase 2 Control Panel Design
- Phase 3 Construction

### **B. SCOPE OF SERVICES**

Basic Services to be provided by Donohue (Engineer) for this Project under this Agreement are as follows:

## Phase 1 – Site Investigation and Planning

To start the project, Donohue will host a virtual kickoff meeting to introduce the staff, review the project plan, and coordinate on site activities.

## Task 1 – Inventory of Remote Sites

Donohue will visit and document inventory of each remote site in the Southeast Region and Lakes Region. Inventory will include, but not limited to, existing equipment, physical condition rating, existing communication protocols, panel dimensions, and GPS coordinates.

### Task 2 - Cellular Feasibility Study

Donohue and its subconsultant, J&K Communication, will use the GPS coordinates for each of the remote sites and conduct an electronic propagation study to verify cellular communication probability for each of the selected sites. Donohue will consult with Verizon Wireless for the cellular communication.

## Task 3 - Standardization and Cost Analysis

Donohue will consolidate the results of the Field Investigation Report to develop a set of Standard Lift Station control panels. It is assumed that many of the 48 remote sites will be categorized or classified into smaller groupings, which will be used to develop an opinion of probable construction costs. Using a standardized approach provides commonality throughout the hardware and maintenance as well as commonality of the control panel designs, which is the most cost effective means of designing a large quantity of control panels. An example of standardization, which may be expanded or modified during the Project is as follows:

Type 1 - Radio and Antenna Replacement Only

Type 2 - Backpanel Replacement with new control hardware and radio hardware

Type 3 – Complete Control Panel Replacement

Donohue will prepare for and lead a workshop to review the deliverables of the Site Investigation and Planning Phase with the Owner. The workshop will be held at the Owner's facility.

### Phase 1 Deliverables

Task 1 – Field Investigation Report

Task 2 – Cellular Feasibility Report

Task 3 – Standardization Memorandum with Cost Opinions

Following Phase 1, Future Phases 2 and 3 may be authorized through amendments.

# Future Phase 2 – Control Panel Design

Upon completion of the Phase 1 Deliverables, Donohue will prepare control panel designs for each of the remote stations and telemetry hubs, as defined in Phase 1. Donohue will begin with a single control panel design for each of the standard "types" identified in Phase 1. The control panel designs will be submitted to the Owner for review, comment, and approval prior to completing the remaining control panel designs. Control panel designs will include detailed electrical schematics, wire numbering, scaled layout drawings, and bill of materials with manufacturer part numbers.

Upon completion of the detailed control panel design, Donohue will solicit quotations from three reputable UL listed panel shops to receive firm pricing for the control panels and materials. In addition to the material pricing, Donohue will solicit pricing from three electrical subcontractors for installation of control panels, conduit, and field wiring.

### Phase 2 Deliverables

Standard Control Panel Designs (one for each type of lift station)

Detailed Control Panel Designs (one for each remote site)

**Bidding Results** 

### Future Phase 3 - Construction

Upon completion of Phase 2 Deliverables, Donohue will work with the Owner to award subcontracts for the control panel construction and electrical installation. Subcontracts for these services will be negotiated under Donohue's contract with the Owner.

Donohue will provide PLC and HMI programming for the remote sites, telemetry polling hubs, and associated SCADA application development to incorporate the Southeast Region and former Lakes Region remote sites into the existing SCADA system.

Donohue, in cooperation with subcontractors, will complete the installation and functional testing to incorporate the Southeast Region and former Lakes Region remote sites into the existing SCADA system.

Donohue will prepare for and lead biweekly workshops or progress meetings throughout the Construction Phase of the project. Workshops will be used to review progress, coordinate installation, and review Owner concerns throughout the project.

### **Phase 3 Deliverables**

As Built Control Panel Drawings (PDF and AutoCAD Electrical format)

Application programs for all PLC, HMI, radio configurations, or other programmable devices

### C. PROJECT TIMING

Donohue shall be authorized to commence the Services set forth herein upon execution of this Agreement. Engineering Services for Task 1 to be completed within 100 days after execution of this Agreement. The following target milestone dates are anticipated:

Project Kickoff Meeting: Prior to June 30th

Completion of Field Investigations: July 31st

Field Investigations Report: August 14th

Standardization Memorandum: September 4th

#### PART II

### **OWNER RESPONSIBILITIES**

- A. In addition to other responsibilities of Owner set forth in this Agreement, Owner shall:
  - Identify a person authorized to act as the Owner's representative to respond to questions and make decisions on behalf of Owner, accept completed documents, approve payments to Donohue, and serve as liaison with Donohue as necessary for Donohue to complete its Services.
  - 2. Furnish to Donohue copies of existing documents and data pertinent to Donohue's Scope of Services.

### PART III

### COMPENSATION, BILLING AND PAYMENT

- A. Compensation for the work as defined in the Scope of Services (Part I) of this Agreement shall be in accordance with Donohue's standard chargeout rates in effect at the time the Services are performed. Routine expenses will be billed at cost. The total cost for these Services will not exceed \$69,680 without prior written approval from Owner.
- A. Donohue will bill Owner monthly, with net payment due in 30 days.
- B. Donohue will notify Owner if Project scope changes require modifications to the above-stated contract value. Services relative to scope changes will not be initiated without authorization from Owner.

# Lake County Public Works Remote Site SCADA Project Fee Estimate Summary Donohue & Associates, Inc.

		Eng. VII		Eng. V	Eng. IV	Eng. III	Eng. II		Admin III		Total		0.1	Total
Task	\$ 235	\$ 215	\$ 195	\$ 180	\$ 160	\$145	\$ 130	\$ 115	\$ 80	Hours	Labor	Travel	Subs	Cost
Phase 1 - Site Investigation & Planning														
Project Management & Workshops			12		20					32	\$ 5,540	\$ 580		\$ 6,120
Inventory of Remote Sites			120				120			240	\$ 39,000	\$ 5,800		\$ 44,800
Cellular Feasibility Study			16							16	\$ 3,120		\$ 5,000	\$ 8,120
Standardization & Cost Analysis			32		8		24			64	\$ 10,640			\$ 10,640
										-	\$ -			\$ -
Phase 1 Total	-	-	180	-	28	-	144	-	-	352	\$ 58,300	\$ 6,380	\$ 5,000	\$ 69,680
Phase 1 Labor Dollars by Labor Class	\$ -	\$ -	\$ 35,100	\$ -	\$ 4,480	\$ -	\$ 18,720	\$ -	\$ -					

Donohue & Associates, Inc. 05/06/20