

#19023-12
AGREEMENT FOR PROFESSIONAL SERVICES
For LAKE COUNTY

This AGREEMENT is entered into by and between Lake County (“County”) and RHMG Engineers, Inc. (“Consultant”), 975 Campus Drive, Mundelein, IL 60060.

RECITALS

WHEREAS, Lake County is seeking a Consultant to provide Engineering services for water facilities analysis, design and construction oversight; and

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

WHEREAS, Lake County Purchasing Division issued Statement of Interest Number 19023 in connection with this procurement; and

WHEREAS, the Purchasing Agent and the selection committee have determined that the Proposals submitted by the Consultant on February 14, 2019 is the most advantageous proposal received, and best serves the interests of Lake County; and

WHEREAS, the Lake County Board has passed a resolution at its regular meeting on August 13, 2019 authorizing the Purchasing Agent to execute this Agreement;

SECTION 1. AGREEMENT DOCUMENTS

The Agreement Documents that constitute the entire Agreement between Lake County and Consultant are in order of precedence:

- A. This Agreement
- B. Consultant’s Scope and Fee Proposal noted herein as Exhibit A
- C. Consultant’s Scope of Work Proposal for the Oak Terrace Water System Replacement Project noted herein as Exhibit B
- D. Statement of Interest (SOI) Number 19023 noted herein as Exhibit C

In the event of conflict between or among the above Documents, the Documents listed above are in the order of precedence.

SECTION 2. SCOPE OF WORK

Investigate water system issues and improvement options, prepare all necessary surveys, preliminary and final engineering studies, design documents, and bid documents. Provide bidding services, including, but not limited to, addressing all addendum. Conduct construction-

related services, including, but not limited to, evaluating shop drawings, monitoring construction, preparing change orders, and reviewing contractor pay requests. Obtain all permit approvals and provide as-built record drawings and related documents. Engage with stakeholders and the public, as necessary. Example projects include miscellaneous investigations, watermain replacement design, and lined watermain construction.

For each project the consultant shall provide a detailed scope of work with specific deliverables, as well as an estimate of hours and timeframe for completion for each task order that will be mutually agreed upon by the Parties. The initial task order is attached as Exhibit B.

SECTION 3. DURATION

This contract shall be in effect for a two (2) years period from the date of award. Lake County reserves the right to renew this contract for three (3) additional one (1) year period(s), subject to acceptable performance by the Consultant. At the end of any contract term, Lake County reserves the right to extend this contract for a period up to sixty (60) days for the purpose of getting a new contract in place.

SECTION 4. AGREEMENT PRICE

The County will pay the Consultant based on an hourly rate for services based on the billing rate schedule included in Exhibit A. The total value of task orders shall not exceed \$500,000 in a fiscal year. Subject to the appropriation of sufficient funds. The first task order is included in Exhibit B.

Lake County shall make periodic payments to Consultant based upon actual progress within 30 days after receipt and approval of invoice. Said payments shall not exceed the hourly rates identified in the Agreement, and full payments for each task shall not be made until the task is completed and accepted by Lake County.

SECTION 5. PRICE ESCALATOR

Prices throughout the twelve month initial term of the contract shall remain firm/fixed. Written requests for price revisions after the first twelve months shall be submitted at least sixty (60) days in advance of the annual contract period. Requests must be based upon and include documentation of the actual change in the costs of the components involved in the contract and shall not include overhead and profit. Changes in the contract price shall be made in the amount of the actual change in cost or the percentage increase in the U.S. Average Consumer Price Index for the Midwest Urban - per category "All Items," or 3 percent whichever is less. Surcharges for fuel and/or other costs shall not be allowed. The County reserves the right to reject any price increase and to terminate the contract.

SECTION 6. INVOICES & PAYMENT

- A. A purchase order will be issued for each project task order and Consultant shall submit invoice(s) detailing the products and services provided and identify the purchase order number on all invoices.
- B. Invoices shall be submitted monthly by task order based upon actual progress completed to date. Consultant shall issue an invoice representing the total number of hours performed by its employees during the preceding month, as well as any expenses that have been incurred during the same period. Invoices shall clearly identify the work completed during the invoice period, the overall work completed to-date, as well as the percentage completion for deliverable of each project task order. The County's fiscal year begins December 1st of each year. Prior to December 7th of any year, an invoice shall be submitted for all deliverables completed prior to November 30th of the completed fiscal year.
- C. Consultant shall maintain records showing actual time devoted and cost incurred. The Consultant will reimburse consultant's other direct costs incurred, without mark-up which have been approved by the County. Consultant shall permit a representative from Lake County to inspect and audit all data and records of Consultant for work and/or services provided under this Agreement. Consultant shall make these records available at reasonable times during the Agreement period and for one year after the termination of this Agreement.
- D. All payments shall be made in accordance with the Illinois Local Government Prompt Payment Act (50 ILCS 505/1 et seq.).

SECTION 7. CHANGE ORDERS

In the event changes to the Scope of the project and/or additional work become necessary or desirable to the parties, the parties shall follow the procedures set forth in this Section. A Change shall be effective only when documented by a written, dated agreement executed by both parties which expressly references this Agreement (a "Change Order"). The Change Order shall set forth in detail: (i) the Change requested, (ii) the reason for the proposed Change; (iii) the cost of the Change; and (iv) the impact of the Change on time for completion of the project.

In the event either party desires a Change, the Project Manager for such party shall submit to the other party's Project Manager a proposed Change Order. If the receiving party does not accept the Change Order in writing within ten (10) days, the receiving party shall be deemed to have rejected the Change Order. If the parties cannot reach agreement on a proposed Change, Contractor shall nevertheless continue to render performance under this Agreement in accordance with its (unchanged) terms and conditions.

Changes that involve or increase in the amounts payable by the County may require execution by the County Purchasing Agent. Some increases may also require approval by the County Board. In those cases where the County Purchasing Agent's signature is required, or County Board approval is needed, the Change Order shall not be deemed rejected by County after ten

(10) days provided the Project Manager has indicated in writing within the ten (10) day period of his intent to present the Change Order for appropriate signature or approval.

SECTION 8. KEY PERSONNEL

Consultant shall not replace any Key Personnel without the County's prior written consent, which shall not be unreasonably withheld. Should one of the Key Personnel be reassigned, become incapacitated, cease employment by Consultant, and/or be unable to perform the functions or responsibilities assigned to him or her, Consultant shall (i) within ten (10) business days, temporarily replace them with another properly qualified employee and (ii) within thirty (30) calendar days, permanently replace the contact. Lake County reserves the right with advance notice, and Consultant having the opportunity to remedy, to request the dismissal and removal of Consultant staff from the project for reasonable cause. Any decision to substitute or replace Key Staff for the implementation of proposed solution, will need a prior written consent from the County.

- Provide a summary organizational chart. Identify the primary contact and describe the roles of each key person.
- Provide detailed resumes for all key professionals who will be directly responsible for providing services to the County. Include the following information; title, number of years at your firm, total number of years of experience, professional designations or licenses.

SECTION 9. STATEMENT OF OWNERSHIP

The drawings, specifications and other documents prepared by the Consultant for this Project are the property of the County, and Consultant may not use the drawings and specifications for any purpose not relating to the Project without the County's consent, except for the Consultant's services related to this Project. All such documents shall be the property of the County who may use them without Consultant'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 Consultant.

The Consultant 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 Consultant.

SECTION 10. INDEMNIFICATION

Consultant agrees to indemnify, save harmless, and defend Lake County, its 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 or in connection with the work covered by this Agreement caused directly by the negligence or willful or wanton conduct of Consultant. The foregoing indemnity shall apply except if such injury, death, or damage is caused directly by the gross negligence or willful or wanton conduct of Lake County, its agents, servants, or employees or any other person indemnified hereunder.

SECTION 11. INSURANCE

The Consultant 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 with an A.M. Best Rating of at least A-and provide the County with a Certificate of Insurance 15 days before the start of the project, and thereafter annually for contracts/ projects that will last more than one year. Insurance in the following types and amounts is necessary and/or where applicable:

Commercial General Liability Insurance

In a broad form on an occurrence basis shall be maintained, to include, but not be limited to, coverage for property damage, bodily injury (including death), personal injury and advertising injury in the following coverage forms where exposure exists:

- Premises and Operations
- Independent Contractors
- Products/Completed Operations
- Liability assumed under an Insured Contract/ Contractual Liability
- Personal Injury and Advertising Injury

With limits of liability not less than:

\$ 1,000,000 Each Occurrence

\$ 1,000,000 Products-Completed Operations

\$ 1,000,000 Personal and Advertising injury limit

\$ 2,000,000 General aggregate; the CGL policy shall be endorsed to provide that the General Aggregate limit applies separately to each of the contractor's projects away from premises owned or rented to contractor.

Automobile Liability Insurance (if applicable)

Automobile liability insurance shall be maintained to respond to claims for damages because of bodily injury, death of a person, or property damage arising out of ownership, maintenance, or use of a motor vehicle. This policy shall be written to cover any auto whether owned, leased, hired, or borrowed.

The Contractor's auto liability insurance, as required above, shall be written with limits of insurance not less than the following:

\$ 1,000,000 Combined single Limit (Each Accident)

Excess/ Umbrella Liability (if applicable)

The Consultant's Excess/ Umbrella liability insurance shall be written with the umbrella follow form and outline the underlying coverage, limits of insurance will be based on size of project: \$ 2,000,000 per occurrence limit (*minimum, and may be higher depending on the project*)

Workers Compensation (Coverage A) and Employers Liability (Coverage B)

Workers Compensation Insurance covering all liability of the Contractor arising under the Worker's Compensation Act and Worker's Occupational Disease Act at limits in accordance with the laws of the State of Illinois. Employers' Liability Insurance shall be maintained to respond to claims for damages because of bodily injury, occupational sickness, or disease or death of the Contractor's employees, with limits listed below:

Employers Liability

- a) Each Accident \$1,000,000
- b) Disease-Policy Limit \$1,000,000
- c) Disease-Each Employee \$1,000,000

Such Insurance shall contain a waiver of subrogation in favor of Lake County.

Professional Liability

Professional Liability Insurance shall cover claims arising from the Errors and Omissions with the following limits:

- a) Each Occurrence \$1,000,000
- b) General Aggregate \$3,000,000

Liability Insurance Conditions

Contractor agrees that with respect to the above required insurance:

- a) The CGL policy shall be endorsed for the general aggregate to apply on a "per Project" basis;
- b) The Contractor's insurance shall be primary & non-contributory over Lake County's insurance in the event of a claim.
- c) Contractor agrees that with respect to the above required insurance, Lake County shall be named as additional insured, including its agents, officers, and employees and volunteers and be provided with thirty (30) days' notice, in writing by endorsement, of cancellation or material change. A blanket additional insured ISO endorsement is preferred for Contractors who have multiple projects with the County.
- d) Lake County shall be provided with Certificates of Insurance and the appropriate corresponding ISO form endorsements 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 thirty (30) days prior to the expiration or cancellation of any such policies. No manuscript endorsements will be accepted. Any hard copies of said Notices and Certificates of Insurance and Endorsements shall be provided to:

**Lake County
Purchasing Division
18 N. County 9th Floor
Waukegan, Illinois 60085
Attn: RuthAnne Hall, Lake County Purchasing Agent**

- e) **Electronic copies of Notices, Certificates of Insurance and Endorsements can be emailed to Purchasing@lakecountyil.gov in place of hard copies.**

Failure to Comply: In the event the Contractor fails to obtain or maintain any insurance coverage required under this agreement, Lake County may purchase such insurance coverage and charge the expense to the Contractor.

SECTION 12. INDEPENDENT CONTRACTOR

Consultant is defined and identified as an independent contractor, not an employee or agent of Lake County and the County has no right to control or direct Consultant's manner, detail, or means by which Consultant accomplishes tasks under this Agreement.

SECTION 13. 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 14. 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 15. 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 16. JURISDICTION, VENUE, CHOICE OF LAW AND PROFESSIONAL STANDARDS

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 19th Judicial Circuit Court, State

of Illinois.

SECTION 17. NOTICES AND COMMUNICATIONS

All notices and communications which may be given by Lake County to Consultant relative to this Agreement shall be addressed to the Consultant at the address shown herein below:

RHMG Engineers, Inc.
975 Campus Drive
Mundelein, IL 60060
Attn: William R. Rickert

Copies of any notices and communications which propose to alter, amend, terminate, interpret, or otherwise change this Agreement shall be provided to: Lake County Purchasing Division, 18 North County Street, Waukegan, Illinois 60085-4350; Attention: Purchasing Agent.

SECTION 18. ASSIGNMENT

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

SECTION 19. MODIFICATION

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

SECTION 20. 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 Consultant 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 Consultant's default, the County shall be entitled to contract for consulting services elsewhere and charge the Consultant with any or all losses incurred, including attorney's fees and expenses.

SECTION 21. CONFIDENTIALITY

Both parties acknowledge that Consultant's documents and dealings related to this Agreement are subject to the Illinois Open Meetings Act (5 ILCS 120/1 et seq.) and the Illinois Freedom of Information Act (5 ILCS 140/1 et seq.).

SECTION 22. NEWS RELEASES

Consultant may not issue any news releases regarding this Agreement without prior approval from Lake County.

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

Lake County:

RHMG Engineers, Inc.

Purchasing Agent
Lake County

William R. Rickert, P.E., BCEE
President

Date _____

Date _____

EXHIBIT A



RHMG ENGINEERS, INC.

975 Campus Drive, Mundelein, IL 60060
847.362.5959 | Fax 847.362.0864
www.rhmg.com

June 19, 2019

Lake County Purchasing Division
18 N. County Street, 9th Floor
Waukegan, IL 60085-4350
Attn.: Ms. Yvette Albarran

Re: Statement of Interest No. 19023
Professional Consulting, Surveying and Engineering Services for
Lake County Public Works
Water Facilities Analysis, Design and Construction Oversight
Scope and Fee Proposal

Dear Ms. Albarran:

We are pleased to submit our scope and fee proposal for the Lake County Public Works' SOI No. 19023, Item 12 - Water Facilities Analysis, Design and Construction Oversight.

As indicated in our Statement of Qualifications and our interview presentation, a specific, customized scope of services along with a manpower and fee estimate will be prepared for each task order. A detailed project schedule including milestones for meetings and deliverables will also be prepared for each task order. However, our typical project approach will include:

1 - Preliminary Design

- 1.1 Project Initiation Meeting with LCPWD Staff
- 1.2 Research and Data Collection
- 1.3 Field Investigations
 - 1.3.1 Topographic Surveys
 - 1.3.2 Geotechnical Investigations (if applicable)
 - 1.3.3 Wetland Investigations (if applicable)
- 1.4 Establish Basis of Design and Review with LCPWD Staff
- 1.5 Preliminary Design
- 1.6 Identify Easement and Permit Requirements
- 1.7 Prepare Preliminary Opinion of Probable Construction Cost
- 1.8 Review Meeting with LCPWD Staff

Ms. Yvette Albarran
Na Lake County Public Works Purchasing Division
Re: Statement of Interest No. 19023
Water Facilities Analysis, Design and Construction Oversight
Scope and Fee Proposal

June 19, 2019
Page 2

2 - Final Design

- 2.1 Prepare Final Drawings
- 2.2 Prepare Contract Documents and Specifications
- 2.3 Prepare Easement Documents
- 2.4 Quantities and Final Cost Estimate
- 2.5 Permit Applications
- 2.6 Independent In-House Review
- 2.7 Review Meeting with LCPWD Staff
- 2.8 Finalize Contract Documents

3 - Bidding

- 3.1 Distribute Bid Documents*
- 3.2 Answer Bidder Inquires and Prepare Addenda
- 3.3 Attend Bid Opening*
- 3.4 Review Bids and Prepare Recommendation*

4 - Construction

- 4.1 Preconstruction Conference
- 4.2 Public Outreach
- 4.3 Shop Drawing Review
- 4.4 General Consultation
- 4.5 Construction Observation
- 4.6 Prepare / Process Change Orders
- 4.7 Pay Estimate Review
- 4.8 Final Inspection
- 4.9 Record Drawings

*Tasks typically handled by Lake County Purchasing or LCPWD



Ms. Yvette Albarran
Na Lake County Public Works Purchasing Division
Re: Statement of Interest No. 19023
Water Facilities Analysis, Design and Construction Oversight
Scope and Fee Proposal

June 19, 2019
Page 3

In accordance with our Statement of Qualifications, RHMG proposes the following key personnel:

- William R. Rickert, P.E., BCEE, CFM, President, Project Manager
- Steve E. Zamaites, P.E., Senior Project Engineer, Lead Engineer
- Philip D. Smith, Associate, Senior Designer
- Derek A. Anderson, Surveyor, Construction Inspector
- Lisa M. Brock, P.E., Associate, Construction Engineer
- Scott S. Reisinger, Field Representative

Our billing rates are as follows:

Classification	Average Hourly Billing Rate
Senior Principal	\$180.00
Principal/Project Manager	\$157.00
Senior Project Engineer	\$150.00
Senior Designer	\$147.00
Project Engineer	\$122.00
Junior Engineer	\$108.00
Structural Engineer	\$157.00
Architect	\$124.00
Electrical Engineer	\$151.00
Field Engineer	\$128.00
Field Representative	\$108.00
Senior Drafter/Technician	\$96.00
Drafter/Technician	\$90.00
Junior Drafter/Technician	\$71.00
Clerical	\$69.00



Ms. Yvette Albarran
Na Lake County Public Works Purchasing Division
Re: Statement of Interest No. 19023
Water Facilities Analysis, Design and Construction Oversight
Scope and Fee Proposal

June 19, 2019
Page 4

In accordance with the terms of the Master Agreement, these rates are subject to an annual adjustment.

RHMG has a track record of successfully executing well over 100 engineering projects for LCPWD over the past 45 years, and we look forward to continuing to be of service.

Sincerely yours,

RHMG ENGINEERS, INC.

William R. Rickert, P.E., BCEE, CFM
President

WRR/kar

Enclosure

Cc: Ms. Brittany Sloan, Lake County Public Works Department

EXHIBIT B



RHMG ENGINEERS, INC.

975 Campus Drive, Mundelein, IL 60060
847.362.5959 | Fax 847.362.0864
www.rhmg.com

July 11, 2019

Ms. Brittany Sloan, P.E.
Engineering Supervisor
Lake County Public Works Department
650 Winchester Road
Libertyville, IL 60048

Re: Proposal for Professional Engineering Services
Contract _____ Task Order No. 1
Oak Terrace Water System
Evaluation of Repair Alternatives

Dear Ms. Sloan:

Pursuant to your request, we are pleased to submit this proposal to evaluate alternatives for upgrading and repair of LCPWD's Oak Terrace Water System.

Background

The Oak Terrace Subdivision is located in unincorporated Lake County Adjacent to the southwest boundary of the Village of Mundelein. It is roughly bounded by Diamond Lake on the north; Acorn Lane on the west; the CN Railroad on the south; and the Fremont Township line on the east. Route 60/83 bisects the subdivision with approximately 164 homes north of the highway and 141 homes south of the highway. West Oak Middle School, located on the west side of Acorn Lane, is located immediately west of this subdivision.

The County owns, operates and maintains a sanitary sewer system that serves the entire subdivision, including the middle school. It also owns, operates, and maintains two much more limited public water supply systems in the subdivision: a residential water system serving approximately 20 residences; and a non-transient non-community water supply serving only the West Oak Middle School. The residential system is served by two small diameter limestone aquifer wells (No. 1 on North Oak Avenue and No. 2 on West Hoag Court); and 1,406 feet of 2, 3 and 4-inch diameter water main pipe; Each well facility includes a buried hydropneumatic tank of unknown size. Immediately adjacent to Well No. 1 is a small well pit which contains a system meter, a 35 gallon hypochlorite solution storage tank and feed pump, and the face of a small horizontal hydropneumatic tank with an estimated capacity of 300 gallons.

The Well No. 2 site contains a fully buried hydropneumatic tank (capacity unknown) and a water sampling spout with a locked riser box. There is no chemical feet at Well No. 2.

The West Oak Middle School System is served by a single limestone aquifer well located on the school property south of the school building. The well facilities include a small building and a buried hydropneumatic tank (capacity unknown).

LCPWD desires to evaluate alternatives for the upgrading and repair of the Oak Terrace Water System.

Ms. Brittany Sloan, P.E.
Lake County Public Works Department
Re: Proposal for Engineering Services
Oak Terrace Water System
Evaluation of Repair Alternatives

July 11, 2019
Page 2

Scope of Services

Our proposed scope of services for this assignment includes the following:

1. **Project Initiation Meeting With LCPWD Staff** – This task will consist of a meeting with key RHMG Team members and LCPWD staff. The project objectives, scope and alternatives will be reviewed. Milestone dates for deliverables and review meetings will be established.
2. **Data Collection and Review** – Information relative to the existing Oak Terrace Water System will be reviewed and evaluated. Much of this information has already been placed in the Sharepoint site for the project, and an initial review has been performed in conjunction with the preparation of this proposal. In conjunction with more detailed review, field reconnaissance will also be performed.
3. **Evaluation of Alternatives** – At the project scoping meeting, the following alternatives were identified:
 - 3.1 **Alternate No. 1 – Upgrade Wells and Replace Distribution System with 4-inch Looped System** – Under this alternative, the two existing residential system wells will be abandoned and a second well will be drilled on the West Oak Middle School property. A building housing a new above ground hydropneumatic storage tank and chemical feed systems will also be constructed on the school property. Finally, the existing distribution system will be replaced by a looped system of 4- inch mains serving both the residential system and the school.
 - 3.2. **Alternate No. 2 - Same as Alternate No. 1, But Sized to Serve the Expanded Triangle Area** – As part of this alternative, similar well improvements as in Alternate No. 1 (but with added capacity) will be made. However, the distribution system will be expanded to include a backbone system to facilitate serving the triangle area bounded by Acorn Lane on the west, the CN Railroad on the south and Route 60/83 on the north (see Exhibit A). The expanded backbone distribution system will make it easier for additional residences to connect to the system when their private wells fail.
 - 3.3 **Alternate No. 3 – Same as Alternate No. 2, But With Watermains to Serve the Entire Triangle Area** – This alternative represents an expansion of Alternate No. 2 with the distribution main system expanded to serve the entire triangle area. This alternative would likely require the formation of an SSA for implementation and funding.



Ms. Brittany Sloan, P.E.
Lake County Public Works Department
Re: Proposal for Engineering Services
Oak Terrace Water System
Evaluation of Repair Alternatives

July 11, 2019
Page 3

- 3.4 Alternate No. 4 – Lake Michigan Water Supply for the Entire Oak Terrace Subdivision and the School** - Under this alternative, the existing well system will be abandoned and a new water system supplying Lake Michigan Water through the Village of Mundelein will be constructed throughout the entire Oak Terrace Subdivision. As part of this alternative the distribution mains would be increased to 8-inch diameter in order to provide fire flows. As with Alternate No. 3, this alternative would also likely require the formation of an SSA for implementation and funding.
- 3.5 Analysis of Alternatives** – For each alternative, the required improvements and their associated costs will be identified. Non cost advantages and disadvantages will also be identified,
- 4. Review Meeting With LCPWD Staff** – A review meeting/workshop will be held with key LCPWD engineering and operations staff to present the evaluation of alternatives and obtain feedback.
- 5. Prepare Preliminary Engineering Report** – Based on feedback from the review meeting, the evaluation of alternatives will be fine-tuned; and a report summarizing the findings of the evaluation will be prepared.

Engineering Fees and Schedule

RHMG proposes to perform the above services on an hourly rate basis, using the rates included in our master agreement, with a not-to-exceed fee limit of \$39,319. A detailed manpower estimate illustrating the basis of the proposed fee limit is included as Exhibit B. We will complete these services within 120 calendar days after authorization to proceed, unless we are delayed by circumstances beyond our control.

Sincerely yours,

RHMG ENGINEERS, INC.

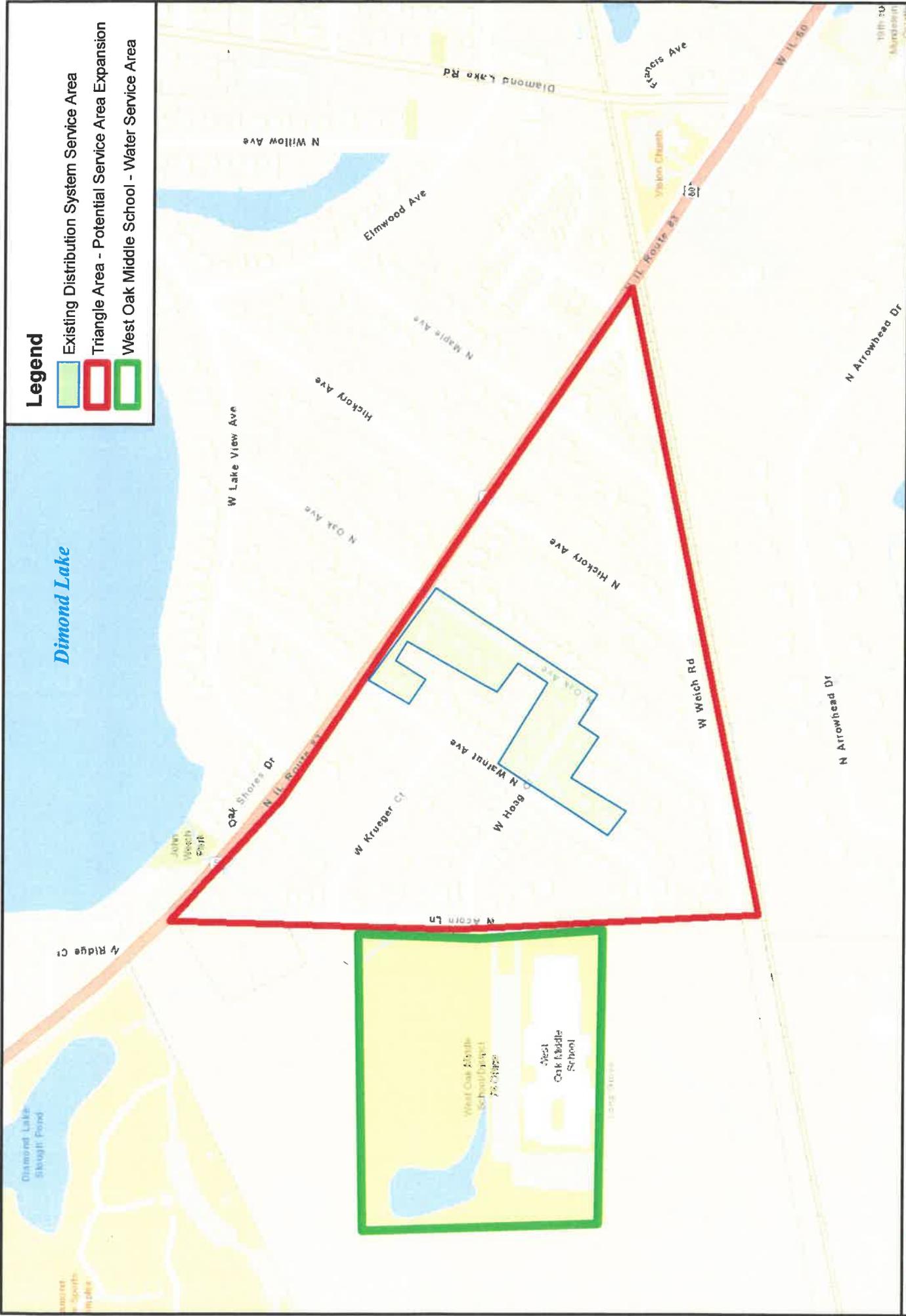
A handwritten signature in black ink, appearing to read "W. Rickert", with a long horizontal stroke extending to the right.

William R. Rickert, P.E., BCEE, CFM
President

WRR/kar

Attachments

Cc: Yvette Albarran
David Salgado



- Legend**
- Existing Distribution System Service Area
 - Triangle Area - Potential Service Area Expansion
 - West Oak Middle School - Water Service Area

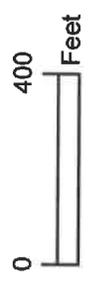


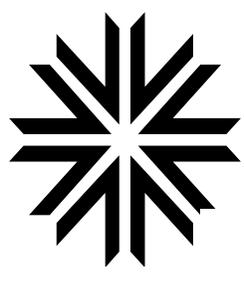
EXHIBIT A
OAK TERRACE WATER SYSTEM
LAKE COUNTY PUBLIC WORKS DEPARTMENT

RHMG ENGINEERS, INC.
 975 Campus Drive
 Mundelein, IL 60060
 P: 847.362.5959

**EXHIBIT B
MANPOWER & FEE ESTIMATE
EVALUATION OF UPGRADE AND REPAIR ALTERNATIVES
OAK TERRACE WATER SYSTEM
LAKE COUNTY DEPARTMENT OF PUBLIC WORKS**

Task	Senior Principal	Sen. Proj. Eng.	Electrical Eng.	Struct. Engineer	Architect	Project Engineer	Senior Drafter	Clerical	Total
1. Project initiation meeting with LCPWD staff	3	3							6
2. Data collection and review	2	10							12
3. Evaluation of alternatives	16	80	8		8	32	32		176
4. Review meeting with LCPWD staff	4	4							8
5. Prepare preliminary engineering report	8	32					32	8	80
Total Hours	33	129	8	0	8	32	64	8	282
Rate	\$180.00	\$150.00	\$151.00	\$157.00	\$124.00	\$122.00	\$96.00	\$69.00	
Cost	\$5,940	\$19,350	\$1,208	\$0	\$992	\$3,904	\$6,144	\$552	
TOTAL LABOR									\$38,090
DIRECT EXPENSES									\$1,229
TOTAL ESTIMATED LABOR PLUS EXPENSES									\$39,319

EXHIBIT C



Lake County

Purchasing Division

<http://doingbusiness.lakecountyil.gov/>

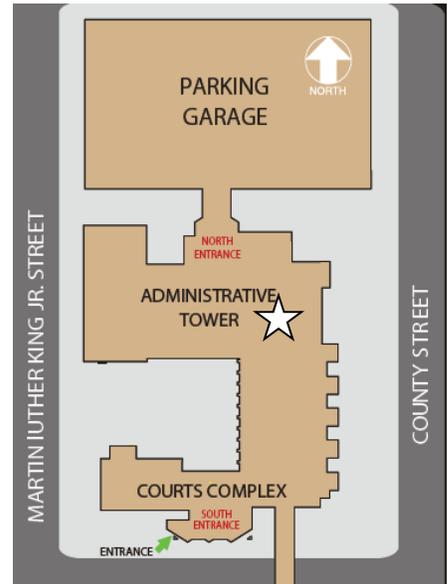
Please note the submission location is:

Lake County
Attn: Purchasing Division
 18 N. County Street – 9th Floor
 Waukegan, IL 60085

Contact information for Lake County Purchasing is:

Purchasing Division
 Phone 847-377-2992
 Fax 847-984-5889
 Email: purchasing@lakecountyil.gov

Waukegan Campus



ALL SUBMITTALS SHOULD BE LABELED ACCORDINGLY. PLEASE USE BELOW LABEL FOR YOUR CONVENIENCE.



SOI No. 19023	Deliver to: Lake County ATTN: PURCHASING DIVISION 18 N. County Street – 9 th Floor Waukegan, IL 60085
Buyer: Yvette Albarran	
<u>SOI Description</u> Professional Consulting, Surveying and Engineering Services for Lake County Public Works	
<u>SOI Due Date*</u> February 14, 2019 at 2:00 p.m.	

*Please note: Responses are due at the 9th floor reception desk and shall be time stamped by 2:00 p.m. local time on the required due date. Please allow sufficient time for parking, passing through security and arriving at the 9th floor.

STATEMENT OF INTEREST # 19023
STATE OF ILLINOIS
Professional Architectural and Engineering Services
for Lake County

Notice is hereby given that Statements of Interest (SOI) (one original and one electronic unprotected copy) will be received from qualified, professional architectural and engineering firms interested in providing the services, as described herein. Firms are encouraged to submit the minimum amount of information as necessary to indicate their interest, experience, and qualifications to perform the work described for any project, service, or combination thereof. Proposals do not need to cover the entire scope of the project types listed in this SOI; firms may submit for as many or as few services as desired. **To Lake County Purchasing, 18 N. County St., 9th Floor, Waukegan, IL 60085 until February 14, 2019 at 2:00 p.m.**

CONTACT / QUESTIONS: Please submit questions on our website at <http://lakecountypurchasingportal.com> by selecting the SOI number and addendum link. Questions may also be submitted via email to purchasing@lakecountyil.gov. All questions shall be submitted no less than seven (7) days prior to the SOI opening date. No interpretation of the meaning of the Statement of Interest will be made orally. Failure to request an interpretation constitutes a waiver to later claim that ambiguities or misunderstandings caused a firm to improperly submit a proposal. Lake County will review submissions and conduct negotiations in accordance with the Local Government Professional Services Selection Act (50 ILCS 510/).

LAKE COUNTY

Lake County is located in northeast Illinois, between the Chicago and Milwaukee metropolitan areas. Lake County is home to more than 700,000 residents. Lake County is committed to open government and transparency, and the County board's conservative fiscal policies have allowed the County to maintain fiscal stability and achieve AAA bond rating from Standard & Poor's and Moody's. Lake County is governed by a 21-member board and managed by a County Administrator.

PROJECT BACKGROUND

The Lake County Public Works Department (LCPWD) provides essential water and wastewater services to over 40% of the County's residents, and the LCPWD owns and operates three water reclamation facilities, twelve water distribution systems, 345 miles of sewer main, 300 miles of water main, and all associated infrastructure. Additionally, the LCPWD ownership portfolio includes many buildings, including administrative offices, maintenance facilities, and operational buildings (pump houses, treatment processes housing). The LCPWD has undertaken a strategic prioritization process to identify critical capital improvement projects. Major capital projects are anticipated for the foreseeable future, with an estimated annual value of \$10 million.

GENERAL QUALIFICATIONS

The statement of interest must provide your firm's qualifications, including ability of professional staff, its past record and experience, performance data on file, willingness to meet time and budget requirements, location, workload of the firm, work on similar projects, past performance on similar projects and financial stability related to design, bidding, and construction inspection for the following projects. Please indicate, by project type, the project type(S) listed for which your firm is interested in providing Professional Consulting Services.

1. Project and Construction Management Services

Manage and oversee consultant capital improvement projects on behalf of the Lake County Public Works Department (LCPWD). Act as the principal agent of the LCPWD in the management of administrative duties of project management, providing resident engineering services, reviewing design and bid documents. Maintain mission alignment, ensure quality, oversee project timeline, track processes and procedures, perform issue

resolution, arrange and attend regular coordination meetings with County staff, manage pay requests, review and negotiate change orders, and address contract issues in partnership with Lake County staff. Oversee field construction and resolve issues. Projects are often highly complex infrastructure improvements including complex coordination sequencing with stakeholders to maintain operational needs throughout the rehabilitation project. Engage with stakeholders and the public, as necessary.

2. Facility Master Plan/Risk Assessments for Capital Planning

Perform risk assessments of infrastructure owned, operated and/or maintained by the Lake County Public Works Department, which includes 72 lift stations, seven pump houses, 29 well houses, 10 reservoirs, seven water towers, and three water reclamation facilities. At a minimum, the firm will perform an assessment of these assets and will prioritize repair/replacement by risk of failure; establish a multi-year replacement program utilizing a risk-based asset ranking approach and provide an estimated schedule to prepare the preliminary engineering report. Additionally, the repair/replacement program will account for proposed capital projects by other public agencies that may impact the scheduling and completion of water and sewer main replacement projects. Engage with stakeholders, as necessary, and coordinate with villages, the Illinois Department of Transportation, the Lake County Division of Transportation, and Townships to consider their upcoming capital plans that may affect projects planned for the Lake County Public Works Department. A similar assessment has been performed for underground sewer and water mains.

3. Building Facility Improvement Design, Technical Analysis and Construction Oversight

Prepare plans, specifications and cost estimates for various facility improvements at Lake County Public Works Department facilities including, but not limited to:

- Mechanical improvements, including, but not limited to, the replacement of air handling units, variable air volume boxes, ductwork, chillers, piping and appurtenances, independent temperature control systems, motorized control valves, flow meters and direct digital controls.
- Electrical improvements including, but not limited to, the replacement of electrical switchgears, automatic transfer switches, transformers, main distribution panels, local panels, motor control centers, stand-by generators and direct digital controls.
- Elevator modernizations improvements including, but not limited to, traction elevators, hydraulic elevators, screw lifts, escalators and direct digital controls.
- Various security improvements including, but not limited to, IP-wireless duress alarm systems, access control systems, high definition security camera systems, and enterprise security automation systems.
- Various fire alarm improvements including, but not limited to, control panels, initiating devices, notification devices, networking and integration.
- Various fire protection systems improvements including, but not limited to, fire suppression systems, fire barriers, smoke barriers, smoke control, smoke evacuation, space planning and risk analysis.
- Various building automation improvements including, but not limited to, geographical representation of mechanical equipment, geographical representation of electrical equipment, HVAC controls and monitoring, electrical system monitoring, lighting system controls and monitoring, fire alarm system monitoring, life safety controls and monitoring, equipment run conditions, energy usages, and e-mail alarming.

4. Design Standards and Details

Develop design standards and details language for the Lake County Public Works Department (LCPWD). The standards and details will be applied to all construction projects related to LCPWD infrastructure, including new construction, repair, and replacement of the following: water main, gravity sanitary sewer main, sanitary force main, pump stations, lift stations, valves, hydrants, air release valves, manholes, record drawing standards etc. The LCPWD has published standard details, which will be used as the starting point for this document, along with the most recent version of the Standard Specifications for Water and Sewer Construction in Illinois. Coordinate with LCPWD staff to gather input from internal stakeholders, including engineers, field inspectors,

maintenance staff, operations personnel, and leadership. Provide a final draft in Microsoft Word, Adobe PDF, and AutoCAD format to be shared online.

5. Annual Inflow and Infiltration (I&I) Monitoring and Sanitary Sewer Evaluation Survey (SSES) Services

Review the sanitary sewer systems owned and operated by the Lake County Public Works Department and recommend a strategic, long-term approach to comprehensively address inflow and infiltration to ensure the systems operate at optimal conditions, reducing stress on infrastructure, including interceptor sewers, lift stations, pump stations, and water reclamation facilities. Perform flow monitoring activities and provide data via an easy to use portal. Complete sanitary sewer evaluation services, including, but not limited to, manhole inspections, smoke testing, dye flooding, and televising. Monitor and assess the success of I&I reduction measures. Provide annual program reports focused on overall strategy, meter basin performance, results achieved, and recommended next steps. Data should be compatible with ESRI Geographic Information Systems (GIS) software. Engage with stakeholders, including outside jurisdictions with competing priorities and limited resources.

6. Water System Modelling and Capacity Analysis

Perform hydraulic modelling and capacity analysis for portions of the Lake County Public Works Department (LCPWD) water systems. Create a report recommending strategic actions to optimize the LCPWD water systems to support a successful and sustainable facilities, capable of accommodating economic development. Provide resulting analysis in a software or database to be managed by the LCPWD after creation, allowing for in-house analysis of the effectiveness of solutions, evaluation of future land use decisions, and monitoring of long-term system performance. All deliverables should be compatible with ESRI Geographic Information Systems (GIS) software.

7. Sanitary Sewer System Modelling and Capacity Analysis

Perform hydraulic modelling and capacity analysis for portions of the Lake County Public Works Department (LCPWD) sanitary sewer system. Create a report recommending strategic actions to optimize the LCPWD sanitary sewer networks to support a successful and sustainable system, capable of accommodating economic development. Provide resulting analysis in a software or database to be managed by the LCPWD after creation, allowing for in-house analysis of the effectiveness of solutions, evaluation of future land use decisions, and monitoring of long-term system performance. All deliverables should be compatible with ESRI Geographic Information Systems (GIS) software.

8. General Engineering Consulting Services

Provide general engineering consulting services, including, but not limited to, sewer and water investigations, preliminary studies, preliminary design, final studies, and final design for unplanned needs, such as time-sensitive repair/improvement project design/review and analysis of complex development proposals. Monitor construction and assist with issue resolution. In addition to civil engineering expertise, electrical engineering, mechanical engineering, structural engineering and automation engineering services may be required. Complete other related work, as assigned. Engage with stakeholders and the public, as necessary.

9. Underground Utility Design Engineering Consulting Services

Provide engineering consulting services for utility relocation design projects, including, but not limited to, preliminary review, survey, preliminary design, final design, permitting, bidding and construction services. Example projects include, but are not limited to, relocation as a result of a roadway project. Coordinate with roadway or utility authority and their consultant. Essential skills include understanding complex roadway and utility projects, including, but not limited to, understanding complex construction phasing, obtaining variances to allow utilities to remain under the pavement, experience coordinating permitting with roadway authorities, experience coordinating relocation in cooperation with utility companies, negotiating agreements with the transportation authority to perform work as a shared service, securing grant funds where possible, interpreting

conditions of existing easements, and securing new easements. Oversee field construction and resolve issues. Review the history of easements and aid in obtaining necessary easements. Engage with stakeholders and the public, as necessary.

10. General Surveying Consulting Services

Provide general survey consulting services, including, but not limited to, producing map exhibits based on legal descriptions, Parcel Index Number (PIN) lists, and surveyed boundary descriptions, locating and staking property lines and construction improvements, preparing topographic survey exhibits and plats of survey. Locate all easement documents associated with specific properties and projects. Visual renderings of legal descriptions and surveyed boundary descriptions must be provided within five business days. Complete other related work, as assigned.

11. Sewer Facilities Analysis, Design and Construction Oversight

Investigate sanitary sewer system issues and improvement options, prepare all necessary surveys, preliminary and final engineering studies, design documents, and bid documents. Flow monitoring data and reports are available for areas of the system. Provide bidding services, including, but not limited to, addressing all addendum. Conduct construction-related services, including, but not limited to, evaluating shop drawings, monitoring construction, preparing change orders, and reviewing contractor pay requests. Obtain all permit approvals and provide as-built record drawings and related documents. Engage with stakeholders and the public, as necessary. Example projects include miscellaneous investigations, sewer lining, and force main rehabilitation.

12. Water Facilities Analysis, Design and Construction Oversight

Investigate water system issues and improvement options, prepare all necessary surveys, preliminary and final engineering studies, design documents, and bid documents. Provide bidding services, including, but not limited to, addressing all addendum. Conduct construction-related services, including, but not limited to, evaluating shop drawings, monitoring construction, preparing change orders, and reviewing contractor pay requests. Obtain all permit approvals and provide as-built record drawings and related documents. Engage with stakeholders and the public, as necessary. Example projects include miscellaneous investigations, watermain replacement design, and lined watermain construction.

13. Drainage Improvement Analysis, Design and Construction Oversight: North Libertyville Estates Levee

The North Libertyville Estates levy is approximately 5,700 feet in length and protects roughly 200 homes from Des Plaines River flooding. Presently stormwater ponds upstream of the levy, and the Lake County Public Works Department desires to improve the drainage and install an automatic pumping system. Prepare all necessary surveys, preliminary and final engineering studies, design documents, and bid documents. Provide bidding services, including, but not limited to, addressing all addendum. Conduct construction-related services, including, but not limited to, evaluating shop drawings, monitoring construction, preparing change orders, and reviewing contractor pay requests. Obtain all permit approvals and provide as-built record drawings and related documents. Coordinate utility service (electric) to the site. Review and compile an emergency evacuation plan, including graphic exhibits and an executive summary. Prepare educational information materials for local area residents; topics include, but are not limited to, description of the levee and its purpose, improvement notices, explanation of evacuation plans. Engage with stakeholders and the public, as necessary, including attendance at community meetings.

14. Annual Water Tower and Reservoir Repair/Rehabilitation

The Lake County Public Works Department owns seven water towers and 10 water reservoirs and conducts an annual repair/rehabilitation program. Perform all necessary inspections and investigations to prepare bid documents for this work. Engage with stakeholders, as necessary.

15. Supervisory Control and Data Acquisition (SCADA) Engineering Consulting Services

Perform field telemetry survey relative to sites within the Southeast Operational Region of Lake County water and sewer systems. Design a telemetry network based on the results of the field survey, existing SCADA network information and historian. Prepare design documents and bid documents. Provide bidding services, including, but not limited to, addressing all addendum conduct construction-related services, including, but not limited to, evaluating shop drawings, monitoring construction, preparing change orders, and reviewing contractor pay requests. Obtain all permit approvals and provide as-built record drawings and related documents. Engage with stakeholders and the public, as necessary. Due to the geographic distance between sites communication between sites using cellular radios and a private network set up by Verizon Wireless has been configured. Panels will be built to house the cellular modem, Programmable Logic Controllers (PLCs) and other necessary equipment. Previous phases of this project installed 900 MHz unlicensed radio and cellular radio communication in other operational areas of the County.

SUBMISSION REQUIREMENTS

Respondents shall include in their SOI a prioritized listing of the above design projects (1 through 15) which are best suited to the capabilities and qualifications of their firm. The SOI shall include a brief description of why they should be chosen for a project(s). The SOQ should be concise and directly relate to the project(s) of interest. The SOI shall be limited to 1 page and each SOQ shall be limited to 10 pages per project.

The County, in accordance with the laws of the State of Illinois, hereby notifies all firms expressing statements of interest that it will affirmatively insure that the contract entered into pursuant to this advertisement will be awarded without discrimination on the grounds of race, color or national origin.

Where appropriate, the responses provided under this section shall include a brief description of examples of outcome based accomplishments that have measurable success factors to demonstrate a firm's qualifications and expertise. All examples should include owner name and contact information.

Section 1.0 – Executive Summary

Provide a brief summary, which describes and highlights your interest, experience and qualifications for these projects. Submit documentation to establish the professional licensing necessary to be eligible for these projects.

Section 2.0 – Relevant Experience

Relevant Experience shall clearly indicate the firm and which member on the project team participated in all relevant experience submitted. All experience submitted for a team member while in the employment of a different firm shall include their title and role on the project as well as the firm name that held the contract for all work submitted for relevant experience.

Section 3.0 – Project Management Team

Describe your approach relative to the delegation of responsibility and assignment of authority and interaction points with the County. Include a listing of key personnel and/or sub consultants proposed for the project team. Include a resume and/or relevant experience of each key team member and a brief description of the tenure or work history among team members.

Provide an organization chart graphically illustrating how your firm would staff and structure your proposed team to perform these projects. Include delegation of responsibility and assignment of authority and interaction points with the County.

List specific personnel (including sub consultants) proposed for the project team, including the project assignment and role or area of responsibility of each individual. Identify the staff team and each members' availability capacity throughout project stages. Provide a resume for each proposed team member, specifically stating tenure or experience with your firm, experience and qualifications of each individual. The above list represents a minimum submittal for key personnel from the Owner's Representative and Project Manager Team.

Section 4.0 – Budget

Describe your firm's methods to maximize and maintain quality project management and project image while maintaining tight budget constraints. Cite examples of specific things that you have done on other projects to meet this objective.

Describe your firm's approach to value engineering and what contribution does the firm typically provide during each phase of design and construction. Value engineering should include the ability of the proposer to evaluate cost saving opportunities in the construction project and add value to the project by applying a creative approach to optimize lifecycle, energy consumption and operational costs resulting from the design.

Section 5.0 - Quality of Documents

List the steps and describe the quality control processes we can expect from the firm during each phase of the design process to assure careful coordination of all disciplines and a high quality of design and contract documents.

EVALUATION PROCESS

Lake County will review submissions and conduct negotiations in accordance with the Local Government Professional Services Selection Act (50 ILCS 510/). The following qualifications will be considered by the County:

- A. Proven experience in design and successful implementation of similar projects.
- B. The strength of value engineering approach, and the proposed engineering approach.
- C. The evaluation of examples of outcome-based accomplishments that have measurable success factors to demonstrate a firm's qualifications and expertise including the testimonials of owners or owner's agents.
- D. The depth of talent and staffing experienced in the execution of similar projects.
- E. The ability of the proposer to work with other consultants to maximize a design solution while maintaining budgetary discipline.
- F. Design quality control and the ability to understand and translate the client's design goals.
- G. Quality and time availability of key project team members.
- H. A proven consistent engineer team leader that listens to the client and appropriately manages and directs the team's efforts.
- I. Experience and capability presenting to policymakers, stakeholders and the public.

As part of its evaluation process the County may seek additional information from firms found to have resources and methodologies best suited to any one of these projects.

TERM OF AWARDED CONTRACTS

The term of awarded contracts shall be in effect for a two (2) year period from the date of award (initial term) or other period as indicated in each Project Description. Lake County reserves the right to renew the contract for three (3) additional one (1) year periods, or as indicated in each project description, subject to acceptable performance by the Contractor. At the end of any contract term, Lake County reserves the right to extend the contract for a period of up to sixty (60) days for the purpose of getting a new contract in place. For any year beyond the initial year, the contract is contingent on the appropriation of sufficient funds. No charges shall be assessed for failure of the County to appropriate funds in future contract years.

General Information Sheet

AUTHORIZED NEGOTIATORS:

Name: _____ Phone # _____ Email: _____

Name: _____ Phone # _____ Email: _____

RECEIPT OF ADDENDA: The receipt of the following addenda is hereby acknowledged:

Addendum No. _____, Dated _____

Addendum No. _____, Dated _____

In submitting this statement of interest, it is understood that the County reserves the right to reject any or all submittals, to accept any alternate submittals, and to waive any informalities in any submittal.

BUSINESS ORGANIZATION: (check one only)

____ Sole Proprietor: An individual whose signature is affixed to this proposal.

____ Partnership: State full names, titles, and addresses of all responsible principals and/or partners on attached sheet.

____ Corporation: State of Incorporation: _____

____ Non-profit Corporation

____ 501c3-- U.S. Internal Revenue Code

By signing this proposal document, the proposer hereby certifies that it is not barred from bidding on a contract as a result of a violation of either Section 33E-3 or 33E-4 of the Illinois Criminal Code of 1961, as amended.

Business Name

Signature

Print or Type Name

Title

Date

References

Provide FIVE (5) references for projects. Governmental references are preferred over others. (Attach additional pages as needed)

Entity: _____

Address: _____

City, State, Zip Code: _____

Name of Contact Person _____

Email Address: _____

Telephone Number: _____

Description of Services Provided: _____

Date of Service: ____/____/____ To ____/____/____

Entity: _____

Address: _____

City, State, Zip Code: _____

Name of Contact Person _____

Email Address: _____

Telephone Number: _____

Description of Services Provided: _____

Date of Service: ____/____/____ To ____/____/____

Entity: _____

Address: _____

City, State, Zip Code: _____

Name of Contact Person _____

Email Address: _____

Telephone Number: _____

Description of Services Provided: _____

Date of Service: ____/____/____ To ____/____/____

Entity: _____

Address: _____

City, State, Zip Code: _____

Name of Contact Person _____

Email Address: _____

Telephone Number: _____

Description of Services Provided: _____

Date of Service: ____/____/____ To ____/____/____

Entity: _____

Address: _____

City, State, Zip Code: _____

Name of Contact Person _____

Email Address: _____

Telephone Number: _____

Description of Services Provided: _____

Date of Service: ____/____/____ To ____/____/____

COMPANY NAME _____

AUTHORIZED SIGNATURE _____

TITLE _____

DATE _____

FIRM QUALIFICATIONS

Name and Address of Office from which this contract will be administered
(ATTACH ADDITIONAL PAGES AS NEEDED)

Name: _____

Address: _____

Phone: _____ Fax: _____

Email Address _____

Project Manager: _____

Years in Business: _____ Number of Employees: _____

Annual Sales: \$ _____ Dunn & Bradstreet #: _____

Indicate if firm is a certified M/W/DBE and attach certification: _____

List employees who will be dedicated to the Project: (Attach additional pages as necessary)

NAME	POSITION TITLE	NUMBER OF YEARS	AREA OF RESPONSIBILITY/TASK EXPERIENCE
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____