AGREEMENT #20146 FOR ENGINEERING SERVICES PER SOI 20146

This AGREEMENT is entered into by and between Lake County (County) and RHMG Engineers, Inc. 975 Campus Drive, Mundelein, Illinois 60060 (hereafter "Engineer").

RECITALS

WHEREAS, Lake County is seeking an Engineer to provide Engineering services for

PW#2020.098, NCT WRF Bar Screen Replacement 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 Attachement A

SECTION 3. DURATION

The works shall be completed within 90 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

\$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 \$49,110.

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: Tom Miles, PE

County will make Payments to:

RHMG Engineers, Inc. 975 Campus Drive Mundelein, Illinois, 60060

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. 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 19th Judicial Circuit Court, State of Illinois.

SECTION 11. 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 12. 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 13. 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 14. MODIFICATION

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

SECTION 15. 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 16. 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 17. 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 18. 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 19. 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:

Austin McFarlane Interim Director

Lake County Public Works

Date: 1/8/21

RHMG Engineers, Inc.:

William Rickert, P.E. BCEE, CFM

President

Date: 12/15/2026



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

December 15, 2020

Mr. Tom Miles, P.E. Principal Engineer Lake County Public Works 650 Winchester Road Libertyville, IL 60048

Re: Proposal for Professional Engineering Services

Preliminary Engineering Investigation

New Century Town WRF Bar Screen Replacement

Dear Mr. Miles:

Pursuant to your request, we are pleased to submit this proposal to investigate the replacement of the existing Bar Screens at the New Century Town Water Reclamation Facility

Background

Preliminary screening at the New Century Town Water Reclamation Facility is currently provided by two (2) Infilco Degremont Inc. "Climber" Model screens, which were originally installed in 1989 and are reaching the end of their useful service life. The screens are located inside the pretreatment Building 25 and discharge screenings onto a belt conveyor which feeds a single screenings compactor.

Design criteria for evaluating equipment:

Parameter	Unit
Number of Screens:	2
Current Screen Angle:	80 degrees
Design Flow:	6.0 MGD DAF 18.0 MGD Peak
Channel Width:	5 feet
Channel Depth:	5 feet
Bar Spacing:	3/8"
Downstream Water Level:	21-inches plus headloss through grit chamber
Upstream Water Level:	30-inches
Maximum Velocity through Screen:	5 feet/second



Mr. Tom Miles, P.E.

Lake County Public Works Department

Proposal for Professional Engineering Services

Preliminary Engineering Investigation

New Century Town WRF Bar Screen Replacement

December 15, 2020

Page 2

Screenings Generation Rate:	8 cubic yards/week
Area Classification:	Indoors Class 1, Div. 1, Group D

LCPWD now desires to conduct an investigation to determine appropriate replacement screens for the system. It is also desired to examine replacement of the conveyor and compactor.

Scope of Services

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

- Request Proposals from Screen Manufacturers Design criteria will be provided to screen manufacturers in order to solicit proposals.
- Review with LCPWD Responsive proposals for screen replacement will be presented to LCPWD staff for review. Based on the preliminary review of proposed screens viable options will be selected for further evaluation.
- 3. Evaluate Screening Options
 - 3.1. Evaluation of Screen Proposals RHMG will review proposals from responsive manufacturers and provide commentary on the suitability of proposed screen designs. Screens will be evaluated for likely screen capture, long-term durability, fit within the facility, long term operational costs and burden on plant staff. Each type of screen proposed will be evaluated in terms of capital and operation and maintenance costs along with the non-cost advantages and disadvantages of each screen.
 - 3.2. Review References RHMG will contact the references provided by each screen manufacturer to establish the reputation and reliability of the manufacturer and the product.
 - 3.3. Evaluation of Required Channel or Facility Modifications RHMG will determine what facility modifications will be necessary for each proposed screen option along with the estimated costs of these modifications.
 - **3.4.** Evaluation of Screen Controls RHMG will evaluate necessary modifications to the screen controls in order to install the new equipment.
 - 3.5. Evaluation of Installation Cost and Timeframes Estimated costs and a timeframe for installation will be developed for each screen. The installation plan



Mr. Tom Miles, P.E.

Lake County Public Works Department

Re: Proposal for Professional Engineering Services

Preliminary Engineering Investigation

New Century Town WRF Bar Screen Replacement

December 15, 2020

Page 3

will be phased to allow for one screen to remain in operation throughout construction.

- 4. Investigation of Conveyor and Compactor Replacement To ensure equipment compatibility and align replacement schedules, screenings conveyance and compaction equipment is often replaced at the same time as the screens from which they collect. As part of this task, RHMG will identify alternative technologies that may be proposed to replace the existing belt conveyor and compactor. Required screenings handling improvements necessary or beneficial to be performed alongside the screen replacement will be identified along with their associated costs.
- **5. Manufacturer Presentations** As part of this task selected manufacturer's will be invited to present their screening offerings either live or remotely to LCPWD and RHMG.
- 6. Carbon Footprint Savings Review A review of the carbon footprint associated with the new versus old equipment will be evaluated. The energy efficiency of the equipment will be evaluated to determine the energy savings as compared to the existing equipment. Additional operational efficiencies will be reviewed as applicable.
- 7. Prepare Draft Report A draft report summarizing the findings and recommendations of the study will be prepared. The report will include general arrangement drawings for each of the screen options and cost estimates will be prepared and submitted to LCPWD for review.
- 8. Review Meeting with LCPWD and Final Report A review meeting will be held with key LCPWD engineering and operations staff. Based on feedback from this meeting appropriate final revisions to the report will be made. The final report will include the following items:
 - Design Data and Design Criteria
 - Recommended Equipment
 - o Replacement Screens
 - o Replacement Conveyor (If Applicable)
 - o Replacement Screenings Compactor (If Applicable)
 - Required Facility Modifications
 - Screen Channels
 - o Controls
 - o Headworks Building
 - General Arrangement Drawings
 - Budgetary Project Costs
 - Final Design and Construction Schedule



Mr. Tom Miles, P.E.

Lake County Public Works Department

Re: Proposal for Professional Engineering Services

Preliminary Engineering Investigation

New Century Town WRF Bar Screen Replacement

December 15, 2020

Page 4

Engineering Fee

RHMG proposes to perform the above services on an hourly rate basis, using the rates included as Exhibit A, with a not-to-exceed fee limit of \$49,110. This estimate assumes presentations from three manufacturers. If additional presentations are scheduled there may be an additional fee. A detailed hour estimate illustrating the basis of the proposed fee limit is included as Exhibit B.

Schedule

Our schedule for this project is as follows:

Task	Date
Approval of Task Order	1/13/2021
Preliminary Evaluation of Alternatives	2/10/2021
Manufacturer Presentations	2/24/2021
Preliminary Design/Costs /Draft Report	3/10/2021
Final Report	4/14/2021

We appreciate this opportunity to be of continuing service to the Lake County Public Works Department. If you have any questions or comments, please contact me at our Mundelein office.

Sincerely yours,

RHMG ENGINEERS, INC

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

President

Attachments

cc: Brittany Sloan



Exhibit A Billing Rates

Classification	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



Exhibit B Hour and Fee Estimate Lake County Public Works Department NCT WRF Bar Screen Replacement Project - Preliminary Design Report

					HOURS				
Project Tasks	Principal / Proj. Manager	QA/QC Manager	Senior Engineer	Project Engineer	Electrical Engineer	Drafter / Technician	Clerical	Hours per Task	Fee Der Task
1.1 Project Kick-Off Meeting	2		4					9	\$ 960.00
1.2 Equipment Evaluation	4	4	20	20				84	\$ 6,788.00
1.3 Draft Report	60	89	40	40	8	24	4	132	\$ 17,364.00
1.4 Manufacturer Presentations - 3 Assumed	φ		12	12				30	\$ 4,344.00
1.5 Carbon Impact Assessment	2		9	9	4			\$	\$ 2,596.00
1.5 Review Meeting	2		4					ø	\$ 960.00
1.7 Final Report	60	ω,	40	9	80	24	4	108	\$ 14,436.00
Total Hours	32	20	126	25	20	48	80	348	
Billing Rate	\$ 180.00	\$ 157.00	\$ 150.00		\$ 151.00	\$ 96.00	\$ 69.00		
Labor Cost	5,760	3,140	\$ 18,900	11,468	\$ 3,020				\$ 47,448.00
Expenses									\$ 1,662.00
Total Fee							THE POST OF		20110
THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS									49.110.00