# **AGREEMENT 21064 FOR ENGINEERING SERVICES**

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#2019.158 Wildwood Water System Storage Improvements 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 300 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 \$214,028.

### **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, Principal Engineer

County will make Payments to:

RHMG Engineers, Inc. Mr. William Rickert, President 975 Campus Drive Mundelein, IL 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 19<sup>th</sup> 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:	RHMG Engineers, Inc.
	SORRE
Ruth Anne Hall	William Rickert, P.E., BCEE, CFM
Purchasing Agent	President
Lake County Purchasing Division	
Date:	Date: 3/15/2021

# ATTACHMENT A



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

February 23, 2021

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

Re: Proposal for Professional Engineering Services

Wildwood Water Storage Improvements

Dear Mr. Miles:

Pursuant to your request, we are pleased to submit this proposal for design and bidding engineering services for a new 1.25 MG elevated water storage tank for the Wildwood Water System. Also included in the project scope will be upgrading of the controls at the Almond and Route 120 Reservoirs, as well as the addition of mixing systems at those reservoirs

#### Background

The Wildwood Water System currently services a population of approximately 14,000 in unincorporated areas including Wildwood, Third Lake, Mariners Cove, Arbor Vista, Liberty Acres, College of Lake County and various retail / commercial developments in the vicinity. The Wildwood Water System receives Lake Michigan Water from CLCJAWA at two delivery stations. Storage within the system is currently comprised of one elevated tank (John Mogg Elevated Tank – capacity 150,000 gallons) and two ground storage reservoirs (Route 120 and Almond Road Reservoirs – capacity 750,000 gallons each).

RHMG recently completed a study to determine the recommended storage volume for the Wildwood Water System and to investigate alternatives for providing the necessary additional storage. As a result of this study, it has been decided to construct a new 1,250,000-gallon elevated storage tank on a parcel owned by Lake County at 18534 W. Old Gages Lake Road. In order to encourage competition, alternates will be bid for both a welded steel spheroid tank and a composite tank consisting of a cast-in-place concrete pedestal supporting a welded steel storage tank. In addition, improvements necessary for improved mixing of the Almond Road and Route 120 ground storage reservoirs will be implemented. Finally, the original controls installed in 1992 will be replaced with new PLC based controls integrated into LCPWD's SCADA System.

#### Scope of Services

#### 1.0 Preliminary Design Phase

1.1 Project Initiation Meeting with LCPWD Staff – This initial task will consist of a meeting of key RHMG team members and LCPWD staff to discuss project requirements, design criteria, and milestone dates for submittals and review meetings.



Lake County Public Works Department

Re: Proposal for Professional Engineering Services

Wildwood Water Storage Improvements February 23, 2021 Page 2

- **1.2 Identify Permit Requirements** In this task, all permits required for the project will be identified. It is anticipated that the following permits will be required:
  - Lake County Planning, Building and Development -Site Development Permit / Watershed Development Permit
  - LCDOT Access permit
  - FAA Consultation to determine if tank is exempt from height restrictions or aircraft warning lights.
  - Illinois EPA Construction and operating permit
- 1.3 Perform Topographic Survey Under this task, a detailed field survey of the project site will be performed. A 1-foot contour map will be created, and all topographic features will be located in the field. The topographic features located will include (but not be limited to) driveways, trees, utility poles, signposts, valve boxes, manholes, catch basins, and culverts. It is assumed that the heavily wooded site will be cleared by others prior to this task.
- 1.4 Geotechnical Investigation RHMG's subcontractor, Soil and Material Consultants, Inc. will perform a geotechnical investigation at the site. Three (3) soil borings drilled to a depth of 40 feet each will be performed at the site and the geotechnical report with the foundation design recommendations will be submitted to LCPWD for review. Sampling and testing for Clean Construction Demolition Debris (CCDD) testing will be performed in conjunction with the geotechnical investigation. It is assumed that the heavily wooded site will be cleared by others prior to this task.
- 1.5 Wetland Delineation Since the site contains previously mapped wetlands, a wetland delineation will be performed by a certified Wetland Specialist. RHMG will utilize specialty subconsultant Hey and Associates for this task. The intent is to avoid any wetland impact so that wetland permitting will not be necessary. However, a request for a jurisdictional determination will be made. Depending on jurisdiction, a request for a Letter of No Impact from Lake County or a Letter of No Objection from the U. S. Army Corps of Engineers will be submitted.
- **1.6. Prepare Preliminary Drawings (30%)** Preliminary drawings will be prepared including:
  - A site plan showing the general arrangement of the elevated tank, interconnecting piping and access drive.
    - Elevation view drawing of the elevated tank.
      - Welded steel alternate
      - Composite tank alternate



Lake County Public Works Department

Re: Proposal for Professional Engineering Services

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- Preliminary landscape plan
- P & ID drawings
- Preliminary layout plan of the mixing system components for the Almond Road and Route 120 reservoirs.
- A sight distance study for the proposed Gages Lake Road access will be prepared using criteria set by the American Association of State Highway and Transportation Officials (AASHTO) and IDOT/LCDOT.
- **1.7. Meet with LCPWD Staff** The preliminary drawings (30%) will be reviewed with LCPWD staff. Comments from the LCPWD will be incorporated into the final design.
- **1.8.** Coordination, Administration & Stakeholders Involvement RHMG will provide the required project coordination, administration and stakeholder Involvement.

# 2. Final Design Phase

- **2.1. Final Design and Prepare Plans** Final design will be performed, and plans prepared for the following elements of the project:
  - Civil/sitework
  - Landscaping
  - Structural
  - Mechanical
  - Electrical/controls

The plans will illustrate all details necessary for permitting, bidding and construction of the project.

- 2.2. Project Specifications Technical specifications will be written for all equipment items, materials of construction and workmanship. The front-end bidding and contract documents will be prepared by LCPWD with assistance from RHMG. As noted previously, in order to encourage competition, alternates will be bid for both a welded steel spheroid tank and a composite tank consisting of a cast-in-place concrete pedestal supporting a welded steel storage tank.
- **2.3. LCPWD Review -** Sets of design documents, plans and specifications will be submitted to LCPWD for review at the 60% and 90% completion level.



Lake County Public Works Department

Re: Proposal for Professional Engineering Services

Wildwood Water Storage Improvements February 23, 2021

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- 2.4. Perform Quality Control Review of Design As a final quality control measure, a final in-house review of the complete design will be performed by experienced senior level staff. The final review will address such issues as coordination between plans and specifications, coordination between drawings, design details, and constructability.
- 2.5. Review Design with LCPWD and Finalize Documents A formal review meeting will be scheduled with appropriate LCPWD staff members to review and discuss the 90% completion submittal. Review comments from LCPWD will be addressed and incorporated into the final plans and specifications. Deliverables will include:
  - Topographic data
  - Geotechnical engineering report
  - Digital copy of plans in PDF and CAD formats
  - Three bound copies of plans
  - Three bound copies of technical specifications
- 2.6. Prepare Opinion of Probable Construction Cost After the completion of the final plans and specifications, a final cost estimate will be prepared. This cost estimate will be based on detailed quantity take-offs for all materials and equipment, together with quotes from manufacturers/suppliers and recent project bid prices.
- 2.7. Permit Applications All necessary forms, schedules, and documentation required to secure the required construction permits or regulatory approvals for the project will be prepared. Requirements of the applicable permitting agencies will be incorporated into the project documents. A construction permit will be required from the Illinois EPA Division of Public Water Supplies. A Watershed Development Permit, Site Development Permit and Building Permit will be required from Lake County Planning, Building and Development Department. Assuming that access from Gages Lake Road is allowed, an access permit from LCDOT will be required.
- **2.8.** Coordination, Administration and Stakeholder Involvement RHMG will provide the required project coordination, administration and stakeholder involvement. Monthly status reports will be submitted to LCPWD on the first Monday of each month.
- 3.0 Bidding Services
  - **3.1. Bidder Inquiries/Addenda -** RHMG will field inquiries from prospective bidders and prepare addenda where required to make any necessary clarifications to the contract plans and specifications. It is assumed that the County Purchasing Department will distribute the bidding documents and addenda to the bidders.



Lake County Public Works Department

Re: Proposal for Professional Engineering Services

Wildwood Water Storage Improvements February 23, 2021

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- **3.2. Pre-Bid Conference -** It is recommended that a pre-bid conference be conducted at the site in order to give the contractors an opportunity to inspect the site and existing facilities. RHMG will participate in this conference and prepare minutes of the meeting for incorporation into an addendum.
- **3.3. Bid Review -** RHMG will assist the County with the review of bids and will provide a bid award recommendation to LCPWD.

# **Engineering Fee and Schedule**

RHMG proposes to perform the above services on an hourly rate basis using the rates included in the attached Exhibit A, with a not-to-exceed fee limit of \$214,028. A detailed hour estimate illustrating the basis of the proposed fee limit is included as Exhibit B.

Dualturia aux Danieus	£40.500
Preliminary Design	\$42,586
Final Design	\$133,804
Bidding	\$15,688
Expenses	
RHMG	\$7,500
Soil Borings	\$7,600
Landscape Architect	\$3,500
Wetland Consulting	\$2,700
Tree Inventory	\$ 650
Total	\$214.028

Exhibit C presents a project schedule for the preliminary design, final design and bidding phases. A total duration of ten months is anticipated for these project phases.

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** 



# **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

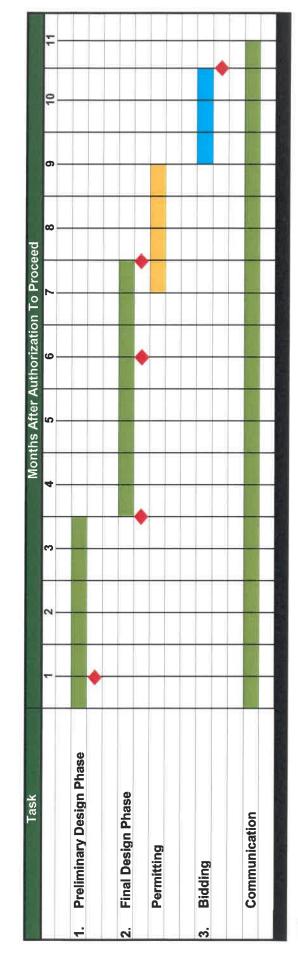


Exhibit B
Hour and Fee Estimate
Lake County Public Works Department
Wildwood Water Storage Improvements

Fee per Task	780 780 150 150 30,968 1,238 3,600	42,586	Fee per Task	85,240 19,562 1,320 2,880 9,502 2,960 7,300 5,040	133,804	\$133,804	Fee per Task	13,096 1,632 960	15,688	15688.	7,500 7,600 3,500 2,700 650
Hours per Task	20 20 20 20 20 20 20 20 20 20 20 20 20 2	321	Hours per Task	662 150 8 8 8 8 74 74 2 1 5 5 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1015		Hours per Task	96 6 8 8 8 8 8	4t 8	Total Labor Fee \$	<i>(</i> 9
Clerical		0 69.00	Clerical	8 4 4	40 69.00 2,760		Clerical	ω	8 69.00 552	Total La	
Senior Drafter	7 2 22	84 96.00 8,064 \$	Senior Drafter	24	262 96.00 \$ 25,152 \$		Senior Drafter	ဖ	96.00 576		
Project Engineer	48	72 122.00 \$ 8,784 \$	Project Engineer	100 24 8 8 32	172 122.00 \$ 20,984 \$		Project Engineer	9 84	30 122.00 \$ 3,660 \$		
HOURS Architect	16	18 124.00 \$ 2,232 \$	Architect		124.00 \$	Sanon			124.00 \$		
Structural Engineer		16 157.00 \$ 2,512 \$	Structural Engineer	8 x	88 157.00 <b>\$</b> 13,816 <b>\$</b>		Structural Engineer	4	4 157.00 \$ 628 \$		
Electrical Engineer	54	24 151.00 \$ 3,624 \$	Electrical Engineer	72 30 4 4	112 151.00 \$ 16,912 \$		Electrical Engineer	2	12 151.00 \$ 1,812 \$		
Senior Proj. Engineer	6401048	63 150.00 \$ 9,450 \$	Senior Proj. Engineer	140 48 4 4 24 16	240 150.00 \$ 36,000 \$		Senior Proj. Engineer	28 0 4	42 150.00 \$ 6,300 \$		
Principal / Proj. Manager	20 3 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	44 180.00 \$ 7,920 \$	Principal / Proj. Manager P	28 8 4 5 8 4 8 8 2 8	101 180.00 \$ 18,180 \$		Principal / Proj. Manager P	2 10	12 180.00 2,160 \$		
		Total Hours Billing Rate \$ Labor Cost \$			Total Hours Billing Rate \$ Labor Cost \$				Total Hours Billing Rate \$ Labor Cost \$		ions
sign Phase	Project Initiation Meeting Identify Permit Requirements Topographic Survey Geoterhical Investation Coordination Weltand Delineation Coordination Prepare Preliminary Drawings Meet with LCPWID Staff Coordination, Project Management & Administration	Fee for Preliminary Design Phase	hase	Final Design & Preirare Plans Preirare Specifications Review Meeting with LCPWD H-House of Review Finalize Plans & Specifications Prepare Optinion of Probable Construction Cost Permitting Coordination, Project Management & Administration		esign Phase	se	Bidder Inquiries/Addenda Pre-Bid Conference Bid Review		Services   Services	RHMO - Reproductions, travel, rental equipment etc. Soil & Material Consultaria - Geotechnical investigation Landscape Architect - Pamela Self Hey & Associates - Wetland Consulting Hey & Associates - Tree Survey
Preliminary Design Phase	1.1 Project In 1.2 Identify P 1.3 Topograp 1.4 Geotechr 1.5 Welland 1.6 Prepare 1.6 Prepare 1.7 Meet will 1.8 Coordina 1.8 Coordina	ee for Prelimi	Final Design Phase	2.1 Final Des 2.2 Pretiare S 2.3 Review N 2.4 In-House 2.5 Finalize P 2.6 Preparer C 2.7 Permitting		Fee for Final Design Phase	Bidding Services	3.1 Bidder Inc 3.2 Pre-Bid C 3.3 Bid Revie		Fee for Bidding Services Direct Expenses	RHMG - F Soil & Mai Landscap Hey & Ass Hey & Ass



# EXHIBIT C PROJECT SCHEDULE WILDWOOD WATER STORAGE IMPROVEMENTS LAKE COUNTY PUBLIC WORKS DEPARTMENT



Indicates Formal Review Session with LCPWD