

AGREEMENT #15052 FOR ENGINEERING SERVICES

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

RECITALS

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

PW#2014.096 Route 120 Reservoir Expansion as described in Attachment A; and

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

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

SECTION 1. AGREEMENT DOCUMENTS

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

SECTION 2. SCOPE OF SERVICES

The Engineer shall provide engineering services described in Attachment A.

SECTION 3. DURATION

The work shall be completed within 150 days after execution of this Agreement.
(Design Phase Services)

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.
 - **General Aggregate Limit** \$3,000,000
 - **Each Occurrence Limit** \$1,000,000
- **Automobile Liability:**
 - **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 \$ 145,656.

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 Public Works
650 West Winchester Road
Libertyville, IL 60048-1391
Attn: David Humbert

County will make Payments to:

RHMG Engineers Inc.,
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 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. WARRANTIES

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:

Ruth Anne Hall
Purchasing Agent
Lake County

Date: _____

RHMG Engineers Inc.:



William R. Rickert
President

Date: 2/10/2015



RHMG ENGINEERS, INC.

975 Campus Drive, Mundelein, IL 60060
847.362.5959 | Fax 847.362.0864

535 Tollgate Road, Suite F, Elgin, IL 60123
847.742.5959 | Fax 847.742.0863

February 6, 2015 (Revised)

Mr. Dave Humbert, P.E.
Principal Civil Engineer
Lake County Public Works Department
650 Winchester Road
Libertyville, IL 60048

Re: Proposal for Professional Engineering Services
Route 120 Reservoir Expansion

Dear Mr. Humbert:

Pursuant to your request, we are pleased to submit this proposal for professional engineering services associated with the expansion of the Route 120 Reservoir in unincorporated Wildwood.

Background

The Wildwood Water System receives Lake Michigan water from CLCJAWA at two sites: the Route 120 Reservoir and the Almond Road Reservoir. Each reservoir is a partially buried cast-in-place concrete structure with a 750,000 gallon capacity, and includes a booster pumping station. Both reservoirs were designed by RHMG in 1990/91.

In order to provide adequate storage for periods of CLCJAWA supply interruption, LCPWD desires to construct an additional 750,000 gallons of storage at the Wildwood Reservoir. This will be accomplished by constructing a new 750,000 gallon reservoir cell just north of the existing reservoir on a portion of the site that was designated for future expansion. Because the existing reservoir roof is comprised of precast double tee panels that overhang the walls, the new reservoir cell will be located approximately 7 to 10 feet north of the existing reservoir.

The existing booster pumps have adequate capacity and are in good condition. However, the project will include the following electrical/controls work:

1. Replacing the outdated controls (an old Dynamic Systems, Inc. system). This will also require replacement of the controls at the Almond Road Reservoir because the two reservoirs operate in conjunction via a common control system.
2. Relocating the existing exterior building lighting and replacing the fixtures with LED fixtures.
3. Relocating the light fixtures in the pump room from the high ceiling to walls and upgrading to more energy efficient fixtures.



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4. Replacement of the main fused disconnect with a main breaker as recommended in the Arc Flash Study.

Scope of Services – Reservoir Expansion

1. Design Services

- 1.1. **Site Visit and Field Measurements** – Utilizing the record drawings we will review the facility to determine if any modifications to the facility have been made after the completion of the record drawings. This task will also involve a site visit by RHMG design personnel to verify existing conditions, including piping configurations, dimensions, available site space, electrical equipment and sizing, and controls system components.
- 1.2. **Topographic Survey** – A field survey of the north portion of the reservoir site will be performed to establish the existing topography, culverts and other pertinent topographic features.
- 1.3. **Preliminary General Arrangement Diagram** – Following the site visit we will prepare a general arrangement diagram for the proposed improvements to determine the spatial requirements for the new facilities and equipment. The arrangement diagram will identify the location for the new reservoir cell, exterior piping, interior reservoir piping, and interior booster pump station piping modifications (25% to 30% submittal).
- 1.4. **Final Design and Prepare Plans** – Final design will be performed and plans prepared for the following elements of the project:
 - Civil/sitework
 - Structural
 - Mechanical
 - Electrical/controls

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

- 1.5. **Write Specifications** - Technical specifications will be written for all equipment items, materials of construction and workmanship. In addition, the front-end bidding and contract documents will be prepared utilizing the latest version of the EJCDC General Conditions with corresponding special provisions provided by LCPWD.



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- 1.6. **LCPWD Review** - Sets of design documents, plans and specifications will be submitted to LCPWD for review at the 60% and 90% completion level.
- 1.7. **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.
- 1.8. **Discuss 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.
- 1.9. **Prepare Opinion of Probable Construction Cost** - By June 15, 2015, RHMG will provide an updated budgetary construction cost estimate for the project. 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.
- 1.10. **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. The increase in impervious area will not exceed the threshold for requiring stormwater detention under the Lake County Watershed Development ordinance. However, a Watershed Development Permit will be required from Lake County Planning, Building and Zoning for the sediment and erosion control aspects of the project.

2. Bidding Services

- 2.1. **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 addenda to the bidders.
- 2.2. **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.
- 2.3. **Bid Review** - RHMG will assist the County with the review of bids and will provide a bid award recommendation to LCPWD.



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3. Construction Services

- 3.1 **Preconstruction Conference** - RHMG will conduct a preconstruction conference with the Contractor, LCPWD, and other applicable parties. RHMG will also prepare minutes of this conference.
- 3.2. **Shop Drawing Review** - RHMG will review shop drawings, which the Contractor is required to submit, for conformance with the contract documents.
- 3.3. **General Consultation** - RHMG will provide general consultation during construction including addressing requests for information (RFI's), attending meetings as requested, etc.
- 3.4 **Foundation Sub grade Inspection** – RHMG will subcontract with Soil and Material Consultants, Inc. to inspect the reservoir sub grade after excavation and prior to placing the aggregate base for the reservoir slab. The purpose of the inspection will be to identify any areas of unstable soils requiring removal and remediation and to witness proof rolls.
- 3.5. **Record Drawings** - RHMG will prepare a set of record drawings incorporating those changes made during construction based on marked up prints furnished by the Contractor and LCPWD's project inspector. Two electronic copies will be furnished to LCPWD.

- 4. **Coordination and Administration** – RHMG will provide the required project coordination and administration.

Engineering Fees 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 \$145,656. A detailed manpower estimate illustrating the basis of the proposed fee limit is included as Exhibit B. The breakdown of the fee by major task is:

Design Services	\$92,544
Bidding Services	\$10,368
Construction Services	\$37,195
Coordination & Administration	<u>\$ 5,549</u>
	\$145,656



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The design phase services will be completed within 150 calendar days after receipt of authorization to proceed, provided that we are not delayed due to circumstances beyond our control.

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,

RHM ENGINEERS, INC.

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

Attachments

EXHIBIT A
BILLING RATES

<u>Classification</u>	<u>Average Hourly Billing Rate</u>
Senior Principal	\$168.00
Principal/Project Manager	\$142.00
Senior Project Engineer	\$135.00
Senior Designer	\$133.00
Project Engineer	\$107.00
Junior Engineer	\$87.00
Structural Engineer	\$138.00
Architect	\$113.00
Electrical Engineer	\$142.00
Field Engineer	\$104.00
Field Representative	\$98.00
Senior Drafter/Technician	\$90.00
Drafter/Technician	\$81.00
Junior Drafter/Technician	\$64.00
Clerical	\$63.00

EXHIBIT B
MANPOWER & FEE ESTIMATE
ROUTE 120 RESERVOIR EXPANSION
LAKE COUNTY DEPARTMENT OF PUBLIC WORKS

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