

**Central Lake County
Joint Action Water Agency**

Paul M. Neal Water Treatment Facility

200 Rockland Road
Lake Bluff, Illinois 60044
Phone 847-295-7788
Fax 847-295-6853

August 25, 2011

Peter Kolb, Public Works Director
County of Lake
650 W. Winchester Road
Libertyville, Illinois 60048

RE: Intergovernmental Agreement - Sharing of Engineering Costs for Membership/Customer Expansion Investigation

Dear Peter Kolb:

As you are aware, the Agency has been actively investigating the feasibility of expanding its system to serve new customers or new members. We have received your letter dated March 24, 2011. In this letter you requested consideration to expand your existing service areas with the Agency to include the unincorporated communities of Grandwood Park and Fox Lake Hills. The Agency has received similar requests from the Villages of Lindenhurst, Lake Zurich, Wauconda, Old Mill Creek, Volo and Lake Villa.

In order to answer these requests the Agency, at its own expense, began a series of engineering studies to determine if any excess capacity was available for new members/customers. We have determined that we can accommodate up to 7.03 million gallons per day (MGD) for this purpose. Unfortunately, 7.03 MGD can not accommodate the 2030 peak water demand needs of every community that has requested consideration to be served by the Agency. As a result, the Agency's Board of Directors, at its August 24, 2011 meeting, narrowed down these choices to two alternatives for further investigation. These alternatives are as follows:

- Villages of Lindenhurst, Lake Villa, and the unincorporated areas of Grandwood Park and Fox Lake Hills.
- Villages of Wauconda and Volo.

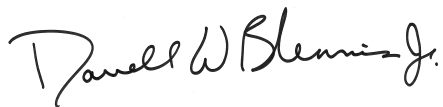
As you can see, your areas are included in one of the alternatives. The Agency also believes that further engineering analysis is needed to determine: (1) the costs for each alternative to connect to the system, (2) which alternative might be best for the Agency from a potential system redundancy perspective, (3) the financial impacts of each alternative. The cost of the study is not to exceed \$60,200 and is to be performed by Camp, Dresser & Mckee.

The Agency's Board of Directors further determined that financial participation is warranted by the remaining communities to complete this study. The Agency has determined that it will be responsible for twenty-five (25) percent of the costs for this study. The remaining seventy-five (75) percent will be split by the communities based on their 2010 average day water demand. Using this methodology your share is twelve (12) percent or \$7,224.00.

The Agency's Board of Directors also approved an Intergovernmental Agreement and Engineering Scope of Work to accomplish this task. These are attached. If you still are interested in the Agency as a means of acquiring Lake Michigan drinking water for these areas, we request that your Board approve this Intergovernmental Agreement by September 24, 2011.

We are looking forward to working with the County on this important subject. If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Darell W. Blenniss, Jr.".

Darell W. Blenniss, Jr.

Executive Director

Cc: Pat Carey, County Board Member



125 South Wacker Drive, Suite 600
Chicago, Illinois 60606
tel: 312 346 5000
fax: 312 346 5228

August 19, 2011

Darrell W. Blenniss, Jr.
Executive Director
Central Lake County Joint Action Water Agency
200 Rockland Road
Lake Bluff, IL 60044

Subject: CDM Scope of Work
Phase 4 Capacity Expansion Assessments

Dear Mr. Blenniss:

Pursuant to our discussion regarding additional assessment of Central Lake County Joint Action Water Agency's (CLCJAWA) ability to expand its water system to neighboring communities, Camp Dresser & McKee Inc. (CDM) is pleased to provide you with the following scope of work, fee, and schedule.

CDM's Scope of Work:

CDM will provide professional engineering services as follows, and as detailed below:

Project Overview

Central Lake County has decided to further develop two possible alternatives for expanding its water system to provide service to additional central Lake County communities:

- Alternative A – Supply water to the communities of Lake Villa, Lindenhurst, Fox lake Hills and Grandwood Park
- Alternative B – Supply water to the communities of Wauconda and Volo

Each of these alternatives will meet the 2030 water demands as described in the Transmission System Capacity Report while staying within CLCJAWA'S prescribed available capacity of 7 mgd. Each alternative will be assessed with respect to: Ease of construction; Capital cost; Benefit to system reliability, potential revenue to CLCJAWA.

Task 1 – Establish Design Criteria

To the extent possible, the Design Criteria established in the Transmission System Capacity Report will be applied to this assessment. These criteria include; Minimum pressure; Maximum flow velocity, Pipe materials, Valve intervals, Air relief and blowoff locations, etc. Additional criteria unique to the Alternatives will be established as necessary.



Mr. Darrell W. Blennis, Jr.

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Task 2 – Route Selection and Hydraulic analysis

CDM will work with CLCJAWA to establish reasonable pipeline routes from the existing water system to the preferred delivery points within the proposed new communities to be served. Consideration will be given to Community preference, ease of constructability and potential for increased reliability of the transmission system.

The hydraulic model developed and used for the Transmission System Capacity Report will be expanded to simulate the proposed water system expansion. Results of the model will be evaluated with respect to the design criteria and determine if pipe size or route adjustment, or booster pumping will be required to meet the design criteria.

CDM will recommend the preferred system improvements for each alternative for further assessment.

Task 3 – Conceptual Design Development

Based on the design criteria and the results of the hydraulic analysis, CDM will size the piping system along with conceptual level design of any pumping, storage and delivery appurtenances required to supply water for the two alternatives.

Task 4 – Capital Cost Estimates

CDM will develop capital cost estimates for the two Alternative systems for the improvements required to extend the CLCJAWA water system from its current boundaries. These costs will include costs of pipeline installation estimated cost of easements, and any additional pumping or storage facilities considered necessary based on the new hydraulic analysis.

Task 5 – Review of Financial Impact Assessment

CDM's Water Rates specialists will review the methodology used by CLCJAWA to develop the financial impact analysis of the two alternatives on CLCJAWA, recommend any potential modification and present an adjusted rate for each Alternative.

Task 6 – Management/Meetings/Deliverables

For scoping purposes, CDM will assume two meetings with CLCJAWA Staff and representatives of the proposed communities, two additional meetings with staff, and two meetings each with the Executive Committee and Board. CDM will deliver working Memoranda for each task listed above, which will then be consolidated into the Draft and Final Reports. Three hard copies and an electronic version of the Draft and Final Reports will be provided to CLCJAWA.



Mr. Darrell W. Blennis, Jr.
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Fee

For the work associated with this Study as described herein, the Agency agrees to pay CDM on a time and materials basis with a not-to-exceed fee of \$60,200. This Study can be performed under our existing Continuing Services Contract.

Schedule

CDM proposes a 4-months schedule to complete the above tasks from the notice to proceed.

If you have any questions regarding this scope of work, please do not hesitate to contact me at (312) 346-5000.

Sincerely,

CAMP DRESSER & MCKEE INC.

A handwritten signature in blue ink, appearing to read 'Leonard M. Rago'.

Leonard M. Rago, P.E., BCEE
Vice President

A handwritten signature in blue ink, appearing to read 'James Urek'.

James Urek, P.E.
Principal

Enclosure: Fee Estimate Table

Exhibit 1
CAMP, DRESSER & MCKEE
CLC-JAWA
 Capacity Phase 4 Assessment

TASK NO.	STUDY PROJECT TASKS	CLIENT SERVICE MANAGER	PROJECT MANAGER AND QA/QC	SENIOR PROJECT ENGINEER	PROJECT ENGINEER	DRAFTING	ADMIN	HOURS	OTHER DIRECT COSTS (ODC's)	SUBTASK LABOR	TASK TOTAL
1.0	ESTABLISH DESIGN CRITERIA										\$3,304.60
	Summarize Criteria from Prev Report			1	2			3		\$387.50	
	Review Criteria with CLC Staff		1	1	4			6		\$821.50	
	Unique Criteria For reliability or Alternatives		1		4			5		\$651.00	
	Working Tech Memo	1	2	2	4			9		\$1,444.60	
2.0	ROUTE SELECTION / HYDRAULIC ANALYSIS										\$20,416.60
	Confirm Community Flows and Delivery points			4	8			12		\$1,550.00	
	Evaluate alternative pipe routes		2	8	10			20		\$2,883.00	
	Develop hydraulic model			8	16			24		\$3,100.00	
	Perform and Evaluate Model runs		2	16	40			58		\$7,502.00	
	Working Tech Memo	1	2	8	28	4		43		\$5,381.60	
3.0	CONCEPTUAL DESIGN DEVELOPMENT										\$6,311.60
	Develop Basis of design for each alternative				16			16		\$1,736.00	
	Develop System Expansion Maps and locate system features				8			8		\$868.00	
	Concept layouts for delivery structures/ pump stations/storage		2		16			18		\$2,170.00	
	Working Tech Memo	1	2		8			11		\$1,537.60	
4.0	CAPITAL COST ESTIMATES										\$5,815.60
	Develop Pipeline costs		1	6	8			15		\$2,108.00	
	Obtain costs for valves, pumps, meters, etc.				4			4		\$434.00	
	Cost estimates for structures/tanks		1		8			9		\$1,085.00	
	Assemble cost estimate tables		1	1	4			5		\$651.00	
	Working Tech Memo	1	2		8			11		\$1,537.60	
5.0	FINANCIAL IMPACTS ASSESSMENT										\$2,886.10
	Review CLCJAWA's Financial impact development		1	3				4		\$728.50	
	Present alternate options			4				4		\$682.00	
	Develop revised/updated financial impact assessment		1	4				4		\$682.00	
	Working Tech Memo	1	1	2				4		\$793.60	
6.0	Management, Quality Control, Production										\$20,608.80
	Meetings	6	24	8	12			50		\$9,287.60	
	Project Setup and Invoicing	1	4				8	13		\$1,723.60	
	Draft and Final report	2	6	4	12	8	16	48		\$5,617.20	
	QA/QC	4	14					18		\$3,980.40	
	TOTAL HOURS	18	69	79	220	12	24	422	\$790.00		\$60,133