



Dr. Karen W. Weaver
Mayor

CITY OF FLINT, MICHIGAN

Department of Finance

Sylvester Jones
City Administrator

David L. Sabuda, CPA
Chief Financial Officer

Dawn Steele
Deputy Finance Director

Date: May 8, 2017

To: Council President Nelson
Inez Brown, City Clerk
Davina Donahue

From: David L. Sabuda ICFO

A handwritten signature in black ink, appearing to read "DS", is written over the text "From: David L. Sabuda ICFO".

Re: Council Member Fields Request – Number 170207 – Additional Water Option
Documentation

On 5/3/2017, City Administration provided water option documentation that included the following documents:

1. Water Supply Options – Staff Review.
2. Water Supply Option Analysis with Criteria – Summary.
3. Water Supply Options – Cost Categories and Comments.
4. Flint Water Treatment Plant Capital and Operating Costs.
5. Water Supply Options – Rates Used in Net Present Value Calculation 4/10/17.
6. Water Supply Options – Net Present Value for Each Cost Category.

Upon presentation Councilwoman Fields requested any third party support documentation from Great Lakes Water Authority (GLWA), Karegnondi Water Authority (KWA) or the Genesee County Drain Commissioner (GCDC) that supports the Water Supply Options and analysis.

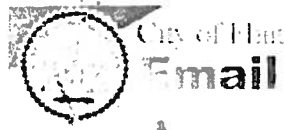
Attached, please find three support documents. Those documents are:

1. KWA Cost per unit at the unit of MCF and CCF dated 1/27/17.
2. Summary of Projected Fiscal Year 2018 GLWA Water Charges to Flint dated 4/16/17.
3. GCDC Interim, Long-term and Emergency Backup Supply communication highlighting costs.

This is being sent to you to fulfill the request of Council Member Fields. It is requested that you present this information to City Council in the usual distribution manner.

Please contact me if you have questions.





David Sabuda <dsabuda@cityofflint.com>

FW: KWA Budget Figures for City of Flint

1 message

Karl Kramer <kkramer@gcdcwws.com>

Fri, Jan 27, 2017 at 8:30 AM

To: "David Sabuda (dsabuda@cityofflint.com)" <dsabuda@cityofflint.com>

Cc: John O'Brien <jfobrien@gcdcwws.com>

David,

In response to your phone message yesterday, I'm resending this email from earlier this month that answered your question. For clarity, I would only add that the per unit costs Flint might use for budgeting would be either \$2.50 per MCF, or \$.25 per CCF if you are accustomed to using CCF in your calculations.

Karl

From: Karl Kramer**Sent:** Tuesday, January 03, 2017 5:18 PM**To:** David Sabuda (dsabuda@cityofflint.com) <dsabuda@cityofflint.com>**Subject:** KWA Budget Figures for City of Flint

David,

Per our conversation, here are several figures and calculations which should be helpful. First, let me point out a few documents which are included. Appendix A to the Jones & Henry Engineering report has some pertinent data, especially on page 3 in regards to the KWA operations and maintenance cost projections and the volume splits between Flint and GCDC. Appendix C contains additional specifics regarding the City of Flint projections. Both of these documents are included in the full J&H engineering report that you have in your copy of the 2014 KWA \$220.5MM bond OS. I've also attached the Bond Cost Allocation spreadsheet again, as it has the data on the existing and future portions of the debt service payable by both Flint and GCDC.

The Jones & Henry report projected KWA O&M costs of approximately \$2,500,000 to \$2,600,000 for calendar year 2018 based on approximately 24 total average MGD. In the report, they also projected the City of Flint utilizing 43.6% of the water produced by the KWA, with GCDC utilizing the remaining 56.4%. However, in reviewing water purchased over the past 12 months, it looks like the current split would be more like 52% Flint and 48% GCDC, while the combined 24 average MGD does seem to currently be accurate. So, \$2,500,000 divided by 8,760 (24MGD x 365 days) would yield a cost per MG of approximately \$285, or cost on an MCF basis of approximately \$2.15. If the O&M cost to produce raw KWA water was closer to \$3,000,000 in 2018, the per MGD cost would be closer to \$342, and the MCF cost would be approximately \$2.56. Either way, it looks like Flint should be budgeting for closer to 52% of the total KWA O&M cost, with GCDC at 48%. I would also point out that in our internal budgeting for KWA O&M costs we are using a \$2.50 per MCF figure.

The KWA Bond Cost Allocation spreadsheet has the detailed calculations on all three bonds involved with the KWA project, including the 2016 bond which needs to be refinanced by May 1, 2018. My estimates on the ultimate amount borrowed and potential borrowing costs were perhaps a bit conservative at the time, but given the upward movement in interest rates over the past couple of months, the final figures may be closer to my overall projections. With that said,



the approximate final borrowing costs for the City of Flint of \$7,020,000 beginning in calendar year 2018 seem prudent for budgeting at this time.

Certainly let me know if you have questions on any items.

Thanks,

Karl

Karl Kramer

Deputy Treasurer, CPFO

Karegnondi Water Authority

4610 Beecher Road

Flint, MI 48532-2617

(810) 600-4120 Direct Line

(810) 732-7870 Main Office

kkramer@gcdcwws.com

3 attachments

 **2 Appendix A - Revised 03-17-14.pdf**
2458K

 **4 Appendix C - Revised 03-17-14.pdf**
136K

 **KWA Bond Cost Allocation to GCDC and Flint.xlsx**
37K



Summary of Projected FY 2018 GLWA Water Charges to Flint

	Existing Charges	GLWA Proposal	Variance	% Variance
<u>Flint Demand Assumptions</u>				
1 Annual Water Sales - Mcf	615,000	615,000	0	0.0%
2 Average Daily Sales - mgd	12.60	12.60	0.00	0.0%
3 Max Day Demand - mgd	15.00	15.00	0.00	0.0%
4 Peak Hour Demand - mgd	15.00	15.00	0.00	0.0%
5 <i>Max Day Peaking Factor</i>	<i>1.19</i>	<i>1.19</i>	<i>0.00</i>	<i>0.0%</i>
6 <i>Peak Hour Peaking Factor</i>	<i>1.19</i>	<i>1.19</i>	<i>0.00</i>	<i>0.0%</i>
7 Sales via GCDC Treatment	0	24,400	24,400	NA
8 Net Sales via GLWA Treatment	615,000	590,600	(24,400)	-4.0%
9 Annualized Revenue Req't - Direct GLWA Service	14,068,700	11,129,900	(2,938,800)	-20.9%
10 Fixed Monthly Charge	693,200	556,400	(136,800)	-19.7%
11 Commodity Charge - \$/Mcf	9.35	7.54	(1.81)	-19.4%
12 KWA Debt Service	7,000,000	0	(7,000,000)	-100.0%
13 KWA/GCDC Pass Thru Water Costs (a)	0	1,108,700	1,108,700	NA
14 Adj Annualized Flint Revenue Requirement	21,068,700	12,238,600	(8,830,100)	-41.9%

(a) KWA/GCDC Pass Thru Water Costs	Units	Charge	Annual Cost
Fixed Capacity Reservation - mgd	1.50	203,000	304,500
Commodity Charges - Mcf	24,400	32.96	804,200
Total			1,108,700





GENESEE COUNTY DRAIN COMMISSIONER'S OFFICE

- DIVISION OF -

WATER & WASTE SERVICES

G-4610 BEECHER ROAD - FLINT, MICHIGAN 48532-2617
PHONE (810) 732-7870 - FAX (810) 732-9773

JEFFREY WRIGHT
COMMISSIONER

February 9, 2017

Mr. David Saboda
City of Flint
1101 S. Saginaw Street
Flint, MI 48502

Re: Request for Water Supply

Dear Mr. Saboda:

This letter proposal is in response to your request and our clarification of that request (Appendix 1) for alternative water supply. The proposal is based on a very quick analysis of our ability to deliver, and the City's ability to receive finished water. If the City chooses to move forward with any of the proposals contained herein, we believe it is appropriate to refine the scope of services and to jointly analyze the alternative, prior to execution of any contract or term sheet.

Scope

The City of Flint has requested that the Genesee County Drain Commissioner Division of Water and Waste Services provide them with three proposals for finished water supply. The requests are as follows:

1. Interim water supply, October 2017-October 2019
2. Long term water supply, October 2019- 2047
3. Emergency backup supply, October 2019- 2049

The request and clarification can be found in Appendix 1

Background

In the Spring of 2013 the City of Flint and the Genesee County Drain Commissioner's Division of Water and Waste Services (County Agency) entered into separate water purchase agreements with the Karegnondi Water Authority (KWA). Flint and the County Agency contracted for capacities of 18 mgd and 42 mgd respectively. KWA agreed to provide lake water to each community for treatment and delivery to their respective customers. When those agreements were signed, DWSD terminated the City of Flint's contract effective April 2014.

Due to the termination, Flint chose to rehabilitate its existing water treatment plant, having a capacity of 36 mgd and use the Flint River as its backup water supply. The County Agency chose to construct a new water treatment plant with an onsite water impoundment as its backup water supply. KWA construction commenced with a planned completion date of June 2016. In April 2014, the City of Flint chose to activate its treatment plant and treat the Flint River until KWA water was available. The County Agency chose to stay with Detroit, understanding it would pay a higher rate, until such time as its water plant would be online presumably in October 2017.

Since the City was going to treat the treating river water, in the short term, and Lake Huron water in the long term. The 72 inch main in Genesee County was no longer of value to Flint. The County Agency was developing plans to build a new transmission main from east to west to tie all its service feeds to a common header pipe. Flint approached the County Agency offering to sell the 72 inch main to the County Agency. This allowed the County Agency to forego construction of the new transmission main. The County Agency accepted Flint's offer, and entered into a memorandum of understanding that resulted in the transfer of ownership of the 72 inch main.

In October of 2015, the City made the decision to return to the Detroit water system. To access the Detroit system, the City had to again receive water through the 72 inch main, now owned by the County Agency's water system. The County Agency granted access to the City for use of the 72 inch in a License to Transmit Agreement (Appendix II). The Agreement is clear that when the County Agency's water treatment plant comes online, the Agreement shall be terminated.

Construction of the County Agency's water plant is on schedule. Flint has received a draft report that indicates the renovated Flint water plant will be able to produce finished water from KWA no earlier than October 2019. When the County Agency's plant comes online in October 2017, Flint will not have access to the Great Lakes Water Authority (GLWA) system. (Note: In 2016, Detroit Water System reorganized to become GLWA.) In addition to the interim supply, the City is also looking at alternatives to its water plant, as a long term supply. With the Flint River no longer considered a viable alternative as a backup supply, Flint also needs a second source of finished water to provide redundancy.

The County Agency was created under Public Act 342 of 1939. The County Board of Commissioners appointed the County Drain Commissioner as County Agency who then created the Division of Water and Waste Services. Currently the County Agency has 17 local community customers drawing water from its system. The rates and fees for the system are common to all communities, unlike the GLWA water system. The County Agency's members are customers/owners of the water system, and therefore they are not in a buyer-seller arrangement.

At the time of the contract with KWA, the County Agency's flow rates were 14 mgd and 22 mgd annual average day and maximum day, respectively. The County Agency recognized that an undertaking of the magnitude of the KWA requires long range planning and evaluation. Based on our own growth projections, the County Agency purchased 42 mgd from KWA and began the design and construction of its water treatment plant. The County Agency designed a 45 mgd plant with the initial construction of 30 mgd. The basis of design set its filter rates at 3 gpm per square foot. This is an acceptable, but conservative rate for treating Great Lakes water. It is anticipated that the Division will be able to increase this rate during the summer months with warmer lake water and be able to deliver more water during the County's peak demand.

The impoundment is 150 million gallons with 25 million gallons for daily use and 125 million gallons for emergency supply. This represents 10 days of water supply during emergency conditions.

The County Agency's operational philosophy for the water plant and distribution system is as follows:

1. Water plant will be designed to deliver the maximum 30 million gallons per day
2. Distribution storage and pumpage will be designed to handle maximum day flow, fire protection and water main break flow
3. Elevated storage will be designed to maintain distribution pressures and peak hour flows.

This philosophy does result in excess storage during the winter period. The County Agency takes 50% of its storage off line during this period, typically November through April.

1. Interim Water Supply

The City of Flint has requested a proposal for interim supply from October 2017 until at least October 2019.

The City represented that recent history shows an average daily flow of 13 mgd, a maximum monthly average daily flow of 16 mgd and a maximum daily flow of 24 mgd. The maximum daily flow occurs in January and February, and is related to water main breaks. This is when filter rates are the lowest, due to the incoming temperature of the lake water. Flint indicated that they are looking for maximum day flow, and for the County Agency to assume that the City would have no water storage available at the plant site or its distribution system.

In essence, the City is requesting 80% of the capacity of the designed Genesee County Drain Commissioner's water treatment plant.

Based on those terms, the Division cannot provide a proposal for interim supply at the requested term.

The Division will however, make two other proposals:

A. Interim Supply Beginning October 2017

The County Agency will provide the City of Flint with 13 mgd annual average day (AAD) flow with a maximum day flow of 16 mgd. The water would be delivered to the Dort reservoir on City property through the existing 72 inch diameter pipeline, the Dort reservoir would be a flow through reservoir. At 25 Million gallons this would provide the city with three days of supply for the maximum day of 24 mgd.

B. Interim Supply after June 2018

The capacity at the County Agency's water plant is based on the Preliminary Design Report. The treatment plant is under construction, and is scheduled to be completed in April of 2017. The County Agency has developed a 3-5 month plan to start up the plant, perform shakedown of all the equipment and most importantly, optimize treatment. Once optimization is demonstrated to the MDEQ, the County Agency will begin distribution of the water to its community customers. This optimization will occur during the summer months, during the easiest periods to treat water. To accurately determine capacity, the plant must operate with water temperatures in the 1° to 5°C range. This will not occur until the following winter, January or February 2018. The initial five month start up period is not a sufficient time to perform a detailed analysis of filter rates in excess of 3 gpm/sq ft. As a result the County Agency will not be able to determine what capacity in our plant is available for Flint until March of 2018. We are comfortable in offering 13 mgd AAD to the City of Flint beginning in October 2017, and as our Plant Performance is verified to increase that volume. We anticipate being able to offer 16-18 mgd but cannot guarantee volume greater than 13 mgd AAD until after February 2018.

Costs

The common to all rate is based on a long term supply agreement (30 years). Since the interim agreement is a short term, 2-3 year, agreement, we would provide water to the City at an individual rate. The rate would cover treatment costs, and transmission costs. Note our long term customers pay this cost along with distribution and debt service costs.

While our plant is not operational, we have projected our costs for treatment and transmission at \$3.50 per mcf. This rate would be adjusted as more accurate data, cost and bills, are accumulated. The rate would be adjusted for all customers, not just City of Flint. With the current rate estimate of \$5.00 per mcf, and based on 13 mgd annual average day flow, the annual cost would be just over \$3.17 million annually.

2. Long Term Supply

The City of Flint has requested a proposal for long term supply. This assumes the City of Flint will abandon its plans to refurbish and activate the Flint Water Treatment Plant to treat Lake Huron water. Flows are 13 mgd annual average day flow and 24mgd maximum day flow.

As indicated in the previous section, the County Agency is not in a position to offer a long term agreement without having completed the construction of the water plant and placing it in operation.

In addition to the treatment capacity, the County Agency would also need to examine its raw water impoundment sizing. The impoundment will need to serve as back up to both the County Agency and City.

Our preliminary analysis would require the addition of a 15 mgd treatment train and an additional 100 mg in storage to our system, to meet the City of Flint's request and the County Agency's future demands. The long term arrangement would require a contract term, no less than the term of a bond to cover necessary capital improvements.

Based on the cost of these improvements, the County Agency would be able to offer a long term water supply agreement for July 1, 2018 through June 2048.

The rate for services would be equal to all our existing customers. Again, the current estimate for treatment is \$5.00 per mcf and \$7.90-\$11.10 per mcf for debt coverage. Debt coverage would be converted to a fixed monthly charge.

If the City of Flint wants to pursue this alternative, the County Agency would first be required to obtain authorization from the County Board of Commissioners to supply the City, since they are currently outside our water district. Next, the City of Flint would execute a standard Public Act 342 supply agreement with the County Agency. Providing the capital required to construct the improvements would be the responsibility of the County Agency.

Please note, the debt service would be fixed cost and the treatment cost would be subject to annual adjustments as necessary to cover costs.

While the City requested three specific alternatives from the County Agency, there are other options that could be more viable for the City and County Agency.

3. Emergency Backup Supply

The City of Flint is considering three alternatives for primary supply; Flint Treatment Plant, County Agency Treatment Plant and GLWA. Therefore, there are alternatives for back up supply with varying degrees of effectiveness, we will try to expand on those below:

A. Flint Plant as Primary Supply

The County Agency can provide a backup supply directly to the treatment plant through the 72 inch diameter water main. The County Agency would add a new meter to the 72 inch line, and would be able to deliver daily water for freshness and emergency water up to 16 mgd. The agreement would be a \$50,000.00 fixed monthly fee, and at our commodity rate, current estimate of \$5.00 per mcf.

B. Genesee County as Primary Supply

Since the County Agency is delivering primary water down the 72 inch line, an alternate route will be required. To meet the demands required and to maintain separation from the 72 inch line, the water would be delivered from the County Agency's transmission main located north of the plant on Francis Road. This plan assumes the City can repurpose the 24 inch water main coming out of the Flint water treatment plant and going north on Dort to Coldwater Road. The cost opinion for this work is \$6,342,326 (Appendix III). This line can deliver daily water for freshness and emergency water up to 16 mgd. The agreement would be 30 years, and the fixed cost would be \$100,000.00 per month, and a commodity rate of \$5.00 per mcf.

C. GLWA as Primary Supply

The County Agency at this time does not know how GLWA will deliver water to the City, so it is difficult to determine a cost effective alternative for back up supply. Therefore, all we can offer at this time would be Alternate B as described above.

We conclude this response with the following comment:

The County Agency is providing these proposals at the request of the City of Flint. These proposals were prepared in less than two weeks, and based on the simplest understanding of Flint's needs. The County Agency is willing to pursue each alternative and believes that with a better understanding of Flint's needs, more cost effective solutions can be developed.

As stated earlier, the County Agency is a cooperative of local communities, we are different from the typical buyer-seller relationship. The local communities are partners in the County Agency and actively work with staff to develop long term and short term plans. The local communities are an integral part of our budget and rate processes, we are a true regional effort.

The request by the City was tailored to solicit cost proposals only, we would be remiss in not including our concerns and conditions.

As previously indicated, the County Agency has 17 existing community customers. As part of the agreement, the County Agency exercises authority over the manner in which the communities maintain and operate their distribution systems, as well as the handling of their point of use customers. Each community agrees to comply with the County's standards of construction and all plans and construction are approved by the County Agency.

Since this will not be the case with Flint, the County Agency and Flint will be required to designate a point of delivery. That point of delivery shall be the point of commerce, ownership, and responsibility for water quality. The County Agency can only provide water quality to the point of delivery, and cannot make any representations after it enters into the City of Flint water system.

Once the City selects their interim supply, we believe this will provide more time to identify the most effective alternative for long term supply and will in turn clarify the backup supply. You have assured us that irrespective of the choices the City makes as to its permanent, temporary and back up water supply, the City of Flint will timely make all payments due and perform all of the City's obligations under the June 28, 2013 Raw Water Supply Contract, the August 1, 2013 Karegnondi Water Authority Financing Contract, and the Bond Purchase Agreements signed in connection with the financing of KWA. With that said, find below our proposals.

On a final note, the County Agency believes that it is imperative for the City to select its interim supply. Once this supply is established, the City could delay the decision on the long term supply until all alternatives can be fully developed. As we indicated early in this letter, the County Agency will be able to provide a more detailed proposal on long term supply in March of 2018. We have provided the best answers we could under the circumstances. Should you have any more questions or need further clarification, do not hesitate to contact this office.

Sincerely,



John F. O'Brien, P.E., Director

Division of Water and Waste Services

JFO/NN

CC: Jeff Wright
Kevin Kilby, Esq.
John Young
Bryce Feighner

Enclosure



GENESEE COUNTY DRAIN COMMISSIONER'S OFFICE

DIVISION OF

WATER & WASTE SERVICES

G-4610 BEECHER ROAD • FLINT MICHIGAN 48532-2617

PHONE (810) 732-7870 • FAX (810) 732-9773



JEFFREY WRIGHT
COMMISSIONER

January 25, 2017

Mr. David Saboda
City of Flint
1101 S. Saginaw Street
Flint, MI 48502

Re: City of Flint Request

Dear Mr. Saboda:

This letter is a follow up to our meeting on January 24, 2017, where the City of Flint requested options from the Genesee County Drain Commissioner's office in regards to water supply for the City of Flint on an interim basis, long term basis and a backup supply for the water treatment plant. As indicated in the meeting we have prepared the enclosed outline for service. Please review, correct or comment on the service plan enclosed. Once we receive your acceptance we will finalize the plan costs.

While we recognize the importance of the project, and the City's time constraints, we must point out that our proposed alternative with cost will be prepared in a three week period. This means that there will be a significant number of assumptions required to develop and to cost out the alternate. Due to the scrutiny applied to the process, GCDC will prepare the cost opinion on the high side to cover all costs of the assumptions and unknown components, in preparation of the alternates. This may result in 40% - 50% cost contingencies

Again, please provide comments or acceptance of our understanding of the scope, so that we may prepare our cost opinion.

Should you have any questions or need further comment, do not hesitate to contact this office.

Sincerely,

John F. O'Brien, P.E.
Deputy CEO

JFO/NN

CC: Jeff Wright
John Young
Dave Janson

Enclosure

Scope of Service

1. Interim Service

A. Provide the City of Flint primary water supply for the interim period. The interim period is from the day Genesee County's water plant comes online to the day the Flint water plant comes online; October 2017 thru December 2017

B. Assumptions

a. Flint's demand

i. 13mgd Annual Average Day (Annual)

ii. 16 mgd Maximum Month

iii. 24 mgd Maximum Day

b. Point of Deliver

i. 72" pipeline and Station #2 meter A & B on Flint's property

c. Pressure 70 PSI

d. Flint responsible for peak hour demand

e. No backup supply required

f. Delivery should assume Dort reservoir is out of service, and therefore maximum day supply is required

g. Uninterruptable supply

h. Water quality same as delivered to County customers

C. Request cost for

a. Capital outlay requirements

b. Cost of service- Monthly fixed fee and commodity charge

Based on the infrastructure improvements, availability of service

2. Long Term Service

A. Provide the city long term water supply service. This assumes that the city abandons the renovation of its water treatment plant and enters into a long term contract with GCDC for primary water supply and backup water supply.

B. Assumptions

a. Flint's demand

- i. 13mgd Annual Average Day
- ii. 16 mgd Maximum Month
- iii. 24 mgd Maximum Day
- iv. 13 mgd Emergency

b. Point of delivery

- i. Primary supply- 72" at Station #2 meter A & B
- ii. Emergency supply- To be determined
- iii. Pressure 70 psi
- iv. Flint responsible for peak hour demand
- v. Water delivery assumes Dort reservoir is out of service, and therefore maximum day supply is required
- vi. Uninterruptable supply
- vii. Water quality same as County customers
- viii. Contract term not less than 20 years

C. Request cost for

- a. Capital outlay requirements
- b. Cost of service- Monthly fixed fee and commodity charge

Based on the infrastructure improvements, availability of service

3. Emergency Backup Service

A. Provide the City of Flint with a backup water supply to the City of Flint's treated water or GLWA water as primary source

a. Flint's Demand

i. 13 mgd Emergency flow

b. Point of Delivery

i. Flint plant- 72" pipe at Station #2, meter A & B

ii. GLWA- To be determined

c. Water Quality

i. Water quality for emergency supply will be available on 2 hour notice, which may require continuous flow at reduced volume to maintain quality.

ii. Water quality same as delivered to County Customers

d. Request cost for

i. Capital outlay requirements

ii. Cost of service- Monthly fixed fee and commodity charge

Note: Monthly fixed fee will change if Flint's water treatment plant could provide emergency supply to GCDC

John O'Brien

From: John Young <j.young109@comcast.net>
Sent: Friday, January 27, 2017 7:19 AM
To: John O'Brien
Subject: Draft Letter

I reviewed the draft "Scope of Services" that you provided to me at our meeting on Wednesday. Based on the discussions/conclusions at our meeting, I am assuming the County will no longer consider providing an "interim" supply. Regarding the long-term supply, your assumptions look appropriate. Regarding the emergency/back-up supply, I think you should assume either of two conditions:

- GLWA provides a primary supply through the existing 72" line and GCDC provides an independent emergency supply or,
- GLWA provides an separate primary supply to Flint and GCDC provides the emergency water source through the 72" line

The City is willing to provide an emergency supply to GCDC if it builds its treatment plant or has GLWA as its primary supply.

As discussed at the meeting, we would like to receive your proposal by February 10.

Please let me know if you have any questions.

Thanks,

John

John O'Brien

From: John Young <j.young109@comcast.net>
Sent: Monday, January 30, 2017 8:12 AM
To: John O'Brien
Subject: Flint

As you perform your assessment of the options for providing Flint either its primary supply and/or emergency/back-up supply, please let us know the following:

- Assuming the GCDC would need to be comfortable with their rated plant capacity and possibly undertake improvements/additions at their plant and distribution system to serve Flint, when (what year) should we assume that a primary water source from GCDC could be available?
- Regarding the emergency/backup water source, when should we assume that a back-up water source from GCDC would be available that is totally independent from the 72" line (northern route or use of the 36" KWA line)?

Would it be possible to meet the afternoon of February 8 or morning of February 9 to discuss your conclusions/pricing for providing service to Flint?

Thanks,

John

LICENSE TO TRANSMIT WATER

This License to Transmit Water ("License") entered into on October 14, 2015, (the "License Date" and "Effective Date") is made between the City of Flint, a Home Rule City (the "City"), and the Genesee County Drain Commissioner, as County Agency, a county agency pursuant to the County Public Improvement Act 342 of 1939, as amended, ("GCDC"). The City and GCDC may be referred to individually as a "Party" or collectively as the "Parties."

RECITALS

WHEREAS, the City has requested the Detroit Water and Sewerage Department ("DWSD") to provide the City with potable water; and

WHEREAS, DWSD water distribution system has no physical connection to the City water distribution system; and

WHEREAS, GCDC is currently purchasing potable water from DWSD and GCDC is receiving DWSD water at the water meter GN-01 near Baxter and Potter Roads, located in Genesee County and more fully set forth in Exhibit 1 (hereinafter known as "GCDC/DWSD Connection"); and

WHEREAS, GCDC has a physical connection to the City water distribution system near Center Road and Pierson Road in Genesee Township, Genesee County, Michigan, which is more fully set forth in Exhibit 2 (hereinafter known as "GCDC/City Connection"); and

WHEREAS, GCDC owns nine (9) miles of water transmission pipeline ("Pipeline") that connects the GCDC/DWSD Connection to the GCDC/City Connection; and

WHEREAS, GCDC has the ability to allow Flint to transmit water through the Pipeline from the GCDC/DWSD Connection to the GCDC/City Connection so DWSD may service the City with DWSD treated potable water; and

WHEREAS, this License shall govern the terms and conditions of Flint transmitting water through the Pipeline from the DWSD/GCDC Connection to the GCDC/City Connection; and

WHEREAS, the Parties hereto acknowledge and agree that DWSD may assign its contract to provide potable water to the City to another entity, including, but not limited to, the Great Lakes Water Authority, and, if DWSD assigns its contract to provide water to the City, all reference to DWSD in this License shall be replaced by the party to whom DWSD assigns its contract.

NOW, THEREFORE, THIS LICENSE is hereby made and mutually entered into by the City and GCDC for the mutual consideration stated herein and the Parties agree to the following:

1. **Adoption of Recitals.** All of the matters stated in the Recitals of this License are true and correct and are hereby incorporated into the body of this License as though fully set forth in their entirety herein. However, in cases of conflict, provisions of this License shall prevail over the matters stated in the Recitals.

2. **Contract for Water.** As a condition precedent to this License being effective, the City shall enter into a contract with DWSD for DWSD to supply the City with water and said contract shall require the City to pay DWSD directly for all water consumed by the City and any applicable charges, fees, or other amounts charged by DWSD. The City shall hold GCDC harmless from any and all debts the City incurs from receiving water from DWSD and any and all costs that DWSD may impose on GCDC as a result of the City receiving water from DWSD.

3. **Term.** The Parties hereto understand and acknowledge that GCDC needs the Pipeline to transmit its potable water to its customers once GCDC starts receiving raw water from KWA. The Parties agree and acknowledge that this License shall expire sixty (60) days after the City has received notice from KWA that raw water is available for the City for treatment; however, the City may request GCDC to extend this License until GCDC starts receiving raw water from KWA. The City shall not transmit water through the Pipeline after GCDC begins to transmit its potable water to its customers. The City acknowledges and consents to GCDC terminating any water transmission in the Pipeline for the benefit of the City once GCDC begins to produce and sell its potable water to its customers. The City may terminate this License by providing GCDC with thirty (30) days written notice of termination.

4. **Consideration.** In exchange for GCDC allowing the City to transmit water through the Pipeline, the City shall pay GCDC one dollar (\$1.00) per month for the term of this License. The City is allowed to pay the first nine (9) months in a lump sum payment.

5. **Meters and Billing.** The City hereby grants GCDC complete access to and upon verbal request by GCDC complete control of Station 2, including, but not limited to, all meters, valves, structures, and appurtenances until the Karegnondi Water Authority ("KWA") has notified the City that water is available to the City for treatment or GCDC has provided the City with thirty (30) days notice that GCDC no longer requires access to Station 2. GCDC shall have the meter calibrated within fifteen (15) days of the execution of this License and all costs for the calibration shall be the responsibility of the City. The City shall be entitled to all data, meter reads, and other information that is collected by GCDC at Station 2. The City shall be responsible for all utility costs associated with the operation of Station 2. The City shall be responsible for all repairs to the meter and meter pit. GCDC shall notify DWSD of the monthly meter read for Station 2.

6. **Transmission of Water.** GCDC shall use reasonable diligence to allow the City regular and uninterrupted transmission of water through the Pipeline from the GCDC/DWSD Connection to the GCDC/City Connection; however, Flint shall hold harmless and indemnify GCDC for any damages, breach of contract, or otherwise for interruption of service or curtailment of supply for any cause beyond the control of GCDC. These could include, but are not limited to, Acts of God, strikes, lockouts or other industrial disturbances, acts of public enemy, orders of any kind of the Government of the United States or the State, or any civil or military authority, insurrection, riots, epidemics, landslides, lightning, earthquake, fires, hurricanes, storms, floods, washouts, droughts, arrests, restraint of government and people, civil disturbances, explosions, breakage or accidents to machinery, pipelines or canals, partial or failure of the Pipeline or appurtenances. The City shall further hold GCDC harmless from any claim for damages related to continuity of service by third parties, including DWSD, for GCDC's inability to allow the transmission of water due to any cause beyond the control of GCDC.

7. **Water Quality.** The City shall hold GCDC harmless from any water quality related claim for damages by third parties, including DWSD, served by the City, which are asserted against, or are imposed upon or incurred by GCDC and which result from, relate to, or arise out of a claim regarding the treatment of water or the quality of water.

8. **Volume Available.** The City shall hold GCDC harmless in the event that DWSD cannot meet the volume demands of both GCDC and the City. GCDC shall be entitled to receive the quantity of water requested by GCDC and the City shall be entitled to any remaining volume of water. The City shall notify GCDC daily of its anticipated water volume for that day and GCDC shall be responsible for notifying DWSD of the water volume demands for both GCDC and the City.

9. **Pipeline Malfunction.** If the Pipeline shall malfunction for any reason while the City is transmitting water through the Pipeline, GCDC shall notify the City within two (2) hours of verifying the Pipeline malfunction. Thereafter, the malfunction shall be promptly repaired by GCDC and a detailed invoice for one-half (1/2) of the total cost of the repair shall be submitted to the City. The City shall have thirty (30) calendar days to process and authorize the payment for the repair to GCDC. Payment shall be made to GCDC within thirty-two (32) calendar days by either check or wire transfer. Wire transfer instructions are available from the GCDC Chief Financial Officer. The City shall indemnify and hold GCDC harmless for any and all claims from the City or third parties that relate to the City not being able to supply water to its customers due to the malfunction.

10. **Severability.** The Parties hereto specifically agree that in case any one or more of the sections, subsections, provisions, clauses or words of this License or the application of such sections, subsections, provisions, clauses or words to any situation or circumstance should be, or should be held to be, for any reason, invalid or unconstitutional, under the laws or constitutions of the State or the United States of America, or in contravention of any such laws or constitutions, such invalidity, unconstitutionality or contravention shall not affect any other sections, subsections, provisions, clauses or words of this License or the application of such sections, subsections, provisions, clauses or words to any other situation or circumstance, and it is intended that this License shall be severable and shall be construed and applied as if any such invalid or unconstitutional section, subsection, provision, clause or word had not been included herein, and the rights and obligations of the Parties hereto shall be construed and remain in force accordingly.

11. **Governing Law and Venue.** It is specifically agreed among the Parties to this License that Genesee County, State of Michigan is the place of performance of this License. In the event that any legal proceeding is brought to enforce this License or any provision hereof, the same shall be brought in the Genesee County Circuit Court.

12. **Interpretation and Construction.** For purposes of interpretation and construction of this License, both the City and GCDC shall be deemed to have been the drafter of this License and this License shall not be construed against any Party to this License.

13. **Modification.** This License shall not be modified, altered, or amended except through a written amendment signed by the Parties.

14. **No Third Party Beneficiaries.** This License is not intended to confer upon any person or entity, other than the Parties hereto, any rights or remedies of any kind or nature whatsoever.

15. **Notices.** Other than invoices and payments, any notice, communication, request, reply or advice (herein severally and collectively, for convenience, called "Notice") herein provided or permitted to be given, made or accepted by any Party to any other Party must be in writing and may be given or be served by depositing the same in the United States mail postpaid and registered or certified and addressed to the Party to be notified, with return receipt requested, or by delivering the same to an officer of such Party, or by prepaid telegram when appropriate, addressed to the Party to be notified. Notice deposited in the mail in the manner described above shall be conclusively deemed to be effective, unless otherwise stated herein, from and after the expiration of three (3) days after it is so deposited. Notice given in any other manner shall be effective only if and when received by the Party to be notified. For the purposes of notice, the addresses of the Parties shall, until changed as hereinafter provided, be as follows:

To GCDC: Genesee County Drain Commissioner's Office, Division of Water and Waste Services, G-4610 Beecher Road, Flint, Michigan 48532.

To the City: City of Flint, 1101 South Saginaw Street, Flint, Michigan 48502.

The Parties hereto shall have the right from time to time and at any time to change their respective addresses and each shall have the right to specify as its address any other address by at least fifteen (15) days written notice to the other Party hereto.

IN WITNESS WHEREOF, the Parties hereto acting under authority of their respective governing bodies have caused this License to be duly executed in several counterparts, each of which shall constitute an original, all as of the day and year first above written, which is the License and Effective Date.

GCDC

By: Jeff Wright

Its: Drain Commissioner

CITY:

By: Natasha Henderson

Its: City Administrator

By: Dayne Walling

Its: Mayor

Attest:

By:

By:

This License was prepared by:
Attorney Kevin Kilby (P68599)
McGraw Morris P.C.
2075 West Big Beaver Road
Suite 750
Troy, Michigan 48064
Phone: (248) 502-4000
Facsimile: (248) 502-4001
Email: kkilby@mcgrawmorris.com

Approved as to form by:

Peter M. Bade (P47546)
Chief Legal Officer
City of Flint
1101 South Saginaw Street, Room 307
Flint Michigan 48502

RESOLUTION NO.: _____

PRESENTED: 10-12-15

ADOPTED: _____

**RESOLUTION AUTHORIZING THE CITY ADMINISTRATOR TO TAKE
NECESSARY ACTION TO CONVERT TO THE DETROIT WATER SYSTEM**

BY THE CITY ADMINISTRATOR:

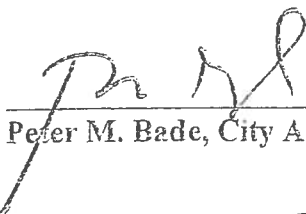
In order to promote the health, safety and welfare of this community, it is in the best interests of the City of Flint for the Detroit Water and Sewer Department (DWSD) to supply the City with treated water pending completion of the Karegnondi Water Authority; and

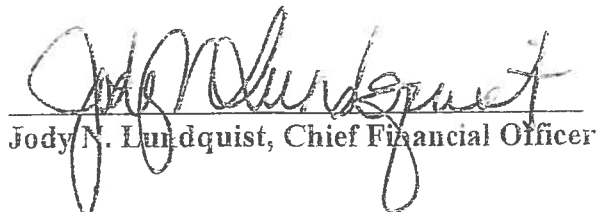
In order for DWSD to supply the City with water, it will be necessary to utilize pipe owned by the Genesee County Drain Commission (GCDC); and

The City, DWSD and GCDC are actively negotiating the terms of the necessary agreements to ensure this transition occurs as soon as possible; and

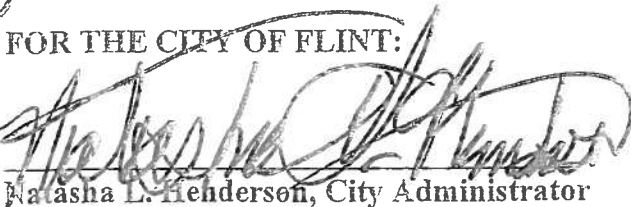
IT IS RESOLVED that the City Administrator is hereby authorized to enter into agreements with DWSD and GCDC for conversion to the Detroit Water System.

APPROVED AS TO FORM:


Peter M. Bade, City Attorney


Jody N. Lundquist, Chief Financial Officer

FOR THE CITY OF FLINT:


Natasha L. Henderson, City Administrator

APPROVED BY CITY COUNCIL:



PRESENTED TO CITY COUNCIL: 10/12/2015

ADOPTED BY CITY COUNCIL: 10/12/2015

Exhibit 'B'
Cost Opinion For
Proposed Watermain Extension
GCDC-WWS
Lewis Road WM Extension
11/19/2015

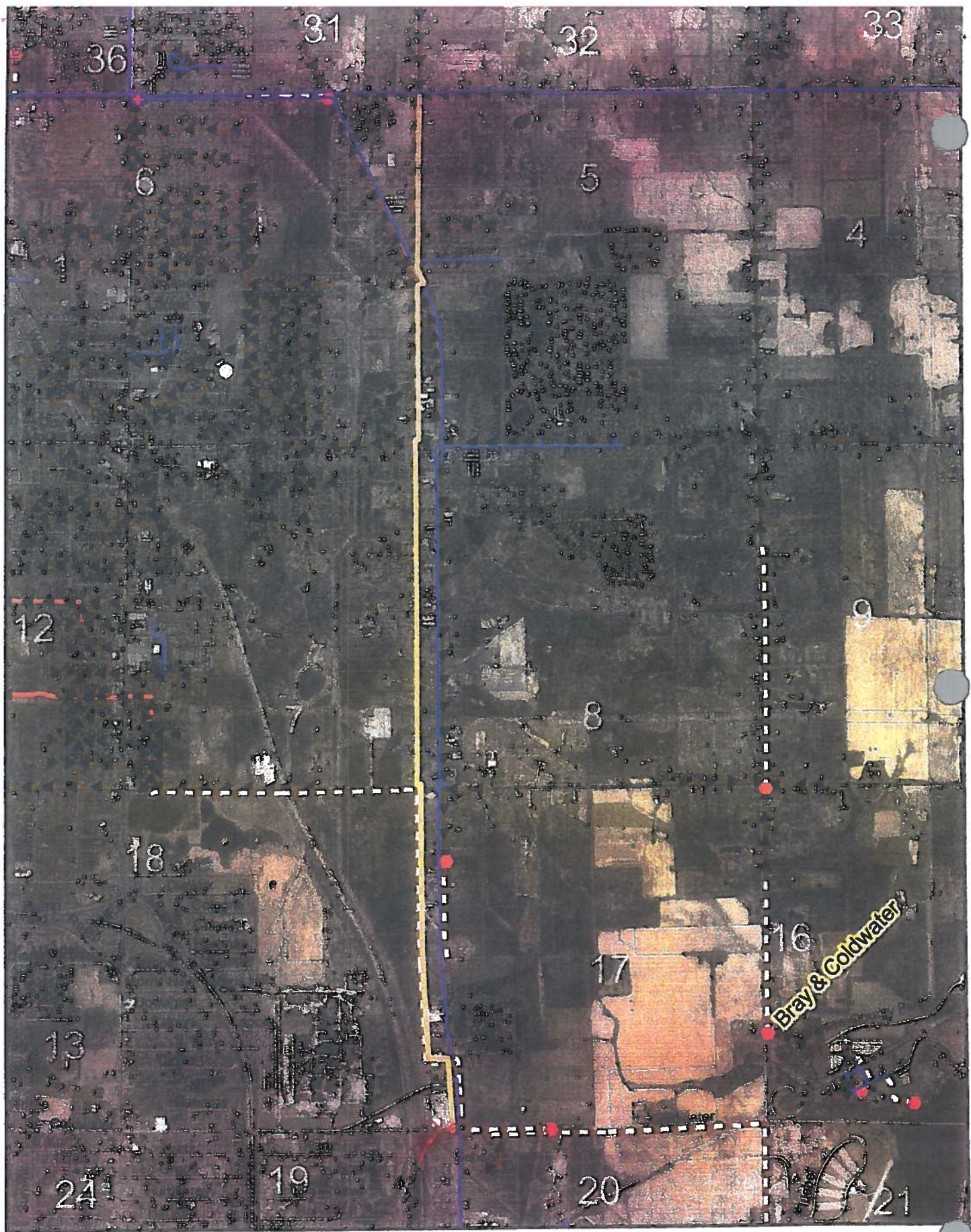
<u>Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Price</u>	<u>Total</u>
Connect to Existing WM	2	EA	\$ 10,000.00	\$ 20,000.00
24" DI Watermain & Appurtenances, Open Cut	16,400	LF	\$ 160.00	\$ 2,624,000.00
24" DI Watermain & Appurtenances, Bore & Jack	550	LF	\$ 550.00	\$ 302,500.00
Meter Pit	1	EA	\$ 230,000.00	\$ 230,000.00
24" Gate Valve & Box	4	EA	\$ 10,000.00	\$ 40,000.00
Driveway Restoration (Concrete & Asphalt)	1,400	SY	\$ 55.00	\$ 77,000.00
Driveway Restoration (Gravel)	2,900	SY	\$ 15.00	\$ 43,500.00
Culverts (12" and 18")	2,300	LF	\$ 36.00	\$ 82,800.00
Fire Hydrant Assembly	32	EA	\$ 4,500.00	\$ 144,000.00
Trench Restoration	17,800	LF	\$ 10.00	\$ 178,000.00
Audio-Video Electrography	1	LS	\$ 6,000.00	\$ 6,000.00
Soil Erosion and Sedimentation Control	1	LS	\$ 50,000.00	\$ 50,000.00
SUBTOTAL				\$ 3,797,800.00
ACCELERATED CONSTRUCTION (20%)				\$ 759,560.00
CONSTRUCTION CONTINGENCY (15%)				\$ 569,670.00
DESIGN CONTINGENCY (15%)				\$ 569,670.00
ENGINEERING (9%)				\$ 341,802.00
BOND/LEGAL (3%)				\$ 113,934.00
INSPECTION (5%)				\$ 189,890.00
TOTAL				\$ 6,342,326.00

NOTE: This estimate does not include the following items:

*Watermain Tap-In Fees	*Traffic Control	*Utility Conflicts
*Clearing & Grubbing	*Geotechnical Reports	*Protective Pipe Lining
*Land Acquisition	*Aerial Mapping	*Road Repair
*Wetland Mitigation	*Any Permits Required by Local, State, Federal, or Private Agencies	

NOTE: No field or survey work was performed in creating this estimate.

M:\KWA Lewis Road WM Extension\2015 11-18 Lewis Road WM extension.xls



24" Lewis Road
Watermain
1 inch = 2,000 feet



11/19/15