



CITY OF CRYSTAL LAKE
AGENDA

CITY COUNCIL
REGULAR MEETING

City of Crystal Lake
100 West Woodstock Street, Crystal Lake, IL
City Council Chambers
December 3, 2013
7:30 p.m.

1. **Call to Order**
2. **Roll Call**
3. **Pledge of Allegiance**
4. **Approval of Minutes – November 19, 2013 Regular City Council Meeting**
5. **Accounts Payable**
6. **Public Presentation**
The public is invited to make an issue oriented comment on any matter of public concern not otherwise on the agenda. The public comment may be no longer than 5 minutes in duration. Interrogation of the city staff, Mayor or City Council will not be allowed at this time, nor will any comment from the Council. Personal invectives against city staff or elected officials are not permitted.
7. **Mayor's Report**
8. **Council Reports**
9. **Consent Agenda**
 - a. **Doherty Properties, north and south of Route 176, east of Route 31 – Annexation Public Hearing Continuation.**
10. **Resolution authorizing execution of a Crystal Lake Watershed Stormwater Management Facilities Non-Residential Maintenance Plan, Grant of Easement and Funding Agreement for the Brilliance Honda property and Fair Oaks Nursing Home property.**
11. **Bid award and resolution authorizing execution of an agreement for the Water Treatment Plant #3 Generator & Switchgear Replacement with a 10% contingency for unforeseen expenses.**
12. **Bid award and resolution authorizing execution of an agreement for the purchase of Liquid Aluminum Sulfate.**
13. **Proposal award and resolution authorizing execution of an agreement for Phase 1 Supervisory Control and Data Acquisition (SCADA) system implementation for lift stations with a 10% contingency for unforeseen expenses.**
14. **Proposal award and resolution authorizing execution of an agreement for Blower room MCC and installation work at Wastewater Treatment Plant #2.**
15. **Proposal award and resolution authorizing execution of an agreement for Engineering for Aeration System Improvements at Wastewater Treatment Plant #2 with a 10% contingency for unforeseen expenses.**
16. **Council Inquiries and Requests.**
17. **Adjourn to Executive Session for the purpose of discussing matters of pending and probable litigation, the sale, purchase or lease of real property, collective bargaining, and personnel.**

18. Reconvene to Regular Session.

19. Adjourn

If special assistance is needed in order to participate in a City of Crystal Lake public meeting, please contact Brad Mitchell, Assistant to the City Manager, at 815-459-2020, at least 24 hours prior to the meeting, if possible, to make arrangements.



Agenda Item No: 9a

**City Council
Agenda Supplement**

Meeting Date: December 3, 2013

Item: Doherty Properties Annexation Public Hearing Continuation
Patrick Doherty, petitioner

Recommendation: Motion to continue the petitioner's request to the January 7, 2014, City Council meeting for the Annexation Public Hearing.

Staff Contact: Michelle Rentzsch, Director of Planning & Economic Development

Background: The petitioner is requesting annexation of four parcels that total approximately 2.5 acres, located north and south of Route 176, east of Route 31. The parcels are improved and unimproved, with Discount Flooring Warehouse, commercial buildings and a vacant parcel.

The petitioner respectfully requests that this matter be continued to the January 7, 2014, City Council meeting for the Annexation Public Hearing, to allow time for this item to be considered at the December 4th PZC meeting.

Votes Required to Pass: A simple majority vote.



Agenda Item No: 10

**City Council
Agenda Supplement**

Meeting Date:

December 3, 2013

Item:

Crystal Lake Watershed Stormwater Management Facilities Non-Residential Maintenance Plan, Grant of Easement and Funding Agreement

Staff Recommendation:

Motion to adopt a resolution authorizing the City Manager to execute a Crystal Lake Watershed Stormwater Management Facilities Non-Residential Maintenance Plan, Grant of Easement and Funding Agreement for the Brilliance Honda property and Fair Oaks Nursing Home property.

Staff Contact:

Erik D. Morimoto, Director of Engineering and Building

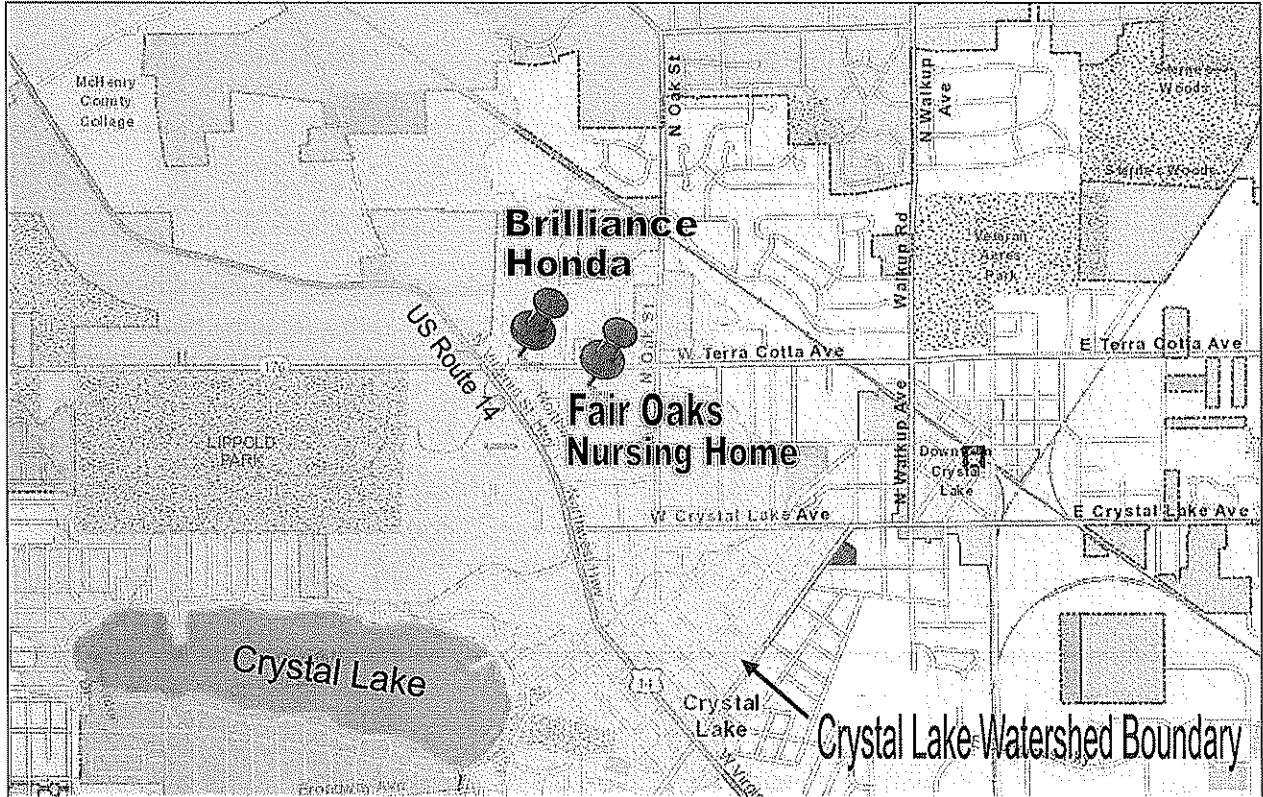
Background:

On November 6, 2007, the City Council adopted the *Crystal Lake Watershed Stormwater Management Design Manual* and the *Crystal Lake Watershed Stormwater Management Program Implementation Plan*. The purpose of both documents is to protect Crystal Lake by regulating the stormwater management practices of properties that develop or redevelop in the watershed.

The *Crystal Lake Watershed Stormwater Management Program Implementation Plan* (Implementation Plan) provides more detail on how the watershed regulations would be executed by the City. The implementation plan gives specific details on what the responsibilities of developers, property owners, and the City are in the watershed.

Per the requirements of the implementation plan, staff has been working to establish a "Crystal Lake Watershed Stormwater Facilities Non-Residential Maintenance Plan, Grant of Easement and Funding Agreement" (agreement). This agreement would be utilized as the template whenever an existing or new development is completed within the watershed.

Two sites have recently redeveloped within the watershed and are ready to execute the required agreements as a condition of their approval – Brilliance Honda and Fair Oaks Nursing Home. A copy of each property's agreement is attached for reference.



Votes Required to Pass:

Simple Majority



DRAFT

The City of Crystal Lake Illinois

RESOLUTION

BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF CRYSTAL LAKE that the City Manager be authorized to execute the Crystal Lake Watershed Stormwater Management Facilities Non-Residential Maintenance Plan, Grant of Easement and Funding Agreement for the Brilliance Honda property and the Fair Oaks Nursing Home property.

DATED this third day of December, 2013.

CITY OF CRYSTAL LAKE, an Illinois
Municipal Corporation

BY: _____
Aaron T. Shepley, Mayor

ATTEST:

Nick Kachiroubas, City Clerk

PASSED: December 3, 2013

APPROVED: December 3, 2013



Agenda Item No: 11

**City Council
Agenda Supplement**

Meeting Date:

December 3, 2013

Item:

Water Treatment Plant #3 Generator & Switchgear Replacement.

Staff Recommendation:

Motion to award the bid for the Water Treatment Plant #3 Generator & Switchgear Replacement, to the lowest responsive and responsible bidder, Newcastle Electric, and adopt a resolution authorizing the City Manager to execute an agreement with Newcastle Electric in the amount of \$703,800.00 with a 10% contingency for unforeseen expenses.

Staff Contact:

Victor Ramirez, P.E., Director of Public Works

Background:

On Friday, November 22, 2013, the City of Crystal Lake publicly opened and read aloud bids received for the purchase and installation of a backup generator and electrical switchgear at Water Treatment Plant #3. During losses of ComEd power, it is vital that City operations be sustained, particularly water and sewer utilities. The following table illustrates a breakdown of the bids received:

<u>Contractor</u>	<u>Bid Amount</u>
√ Newcastle Electric Itasca, IL	\$703,800.00
Homestead Electric Ingleside, IL	\$748,750.00
Carey Electric McHenry, IL	\$779,000.00
Associated Electric Contractors Woodstock, IL	\$793,406.00

√ Indicates recommended lowest responsive and responsible bidder

Discussion:

The backup generator at Water Treatment Plant #3 (WTP3), 850 Virginia Rd, is 40+ years old and experienced a catastrophic failure earlier this year, leaving the plant inoperable in the event of a ComEd power failure.

In addition, the existing electrical switchgear equipment at this facility is also over 40 years old, and has surpassed its anticipated useful life. Parts are difficult to locate and often have to be custom fabricated when they fail. During the design phase of the generator project, it was determined that the switchgear should be replaced due to the many improvements that would be required to accommodate the new generator, and the uncertainty of the useful life of the unit.

The new, 1,000 kW generator will be permanently mounted outside of the water treatment plant, and the new electrical switchgear will be installed inside the electrical room at the water treatment plant. This new generator and switchgear will have the capacity to power the entire facility, allowing full function of all wells and water treatment apparatus.

Recommendation:

The Public Works Department and its consultant engineer, Stanley Consultants, Inc., have reviewed all bids in their entirety, and recommend that the contract for the generator & switchgear replacement at Water Treatment Plant #3 be awarded to Newcastle Electric Contractors, Inc., and that the City Manager be authorized to execute a contract with Newcastle Electric for the contract value of \$703,800.00 with a 10% construction contingency for unforeseen expenses. There are sufficient funds budgeted for this purchase.

Votes Required to Pass:

Simple Majority

DRAFT

RESOLUTION

BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF CRYSTAL LAKE that the City Manager is authorized to execute an agreement between the CITY OF CRYSTAL LAKE and Newcastle Electric for the Generator & Switchgear Replacement at Water Treatment Plant #3 in the submitted bid amount with a 10% contingency for unforeseen expenses.

DATED this _____ day of _____, 2013.

CITY OF CRYSTAL LAKE, an
Illinois Municipal Corporation,

By: _____
MAYOR

SEAL

ATTEST

CITY CLERK

PASSED: _____

APPROVED: _____



Agenda Item No: 12

**City Council
Agenda Supplement**

Meeting Date: December 3, 2013

Item: Liquid Aluminum Sulfate (ALUM)

Staff Recommendation: Motion to award the bid for the purchase of Liquid Aluminum Sulfate to the lowest responsive, responsible bidder, USALCO Michigan Plant, LLC, and adopt a resolution authorizing the City Manager to execute a two-year purchase agreement with USALCO Michigan Plant, LLC in the submitted bid amount.

Staff Contact: Victor Ramirez, P.E., Director of Public Works

Background:

On November 18, 2013, the City of Crystal Lake publicly opened and read aloud the bids received for the purchase of Liquid Aluminum Sulfate (ALUM) for the Public Works Department. The following is a breakdown of the bids received:

Company	2014	2015
√ USALCO Michigan Plant, LLC Baltimore, MD	\$458.24 per dry ton	\$467.04 per dry ton
General Chemical Performance Products, LLC Parsippany, NJ	\$511.00 per dry ton	No Bid
Kemira Water Solutions, Inc. Lawrence, KS	No Bid	No Bid
C&S Chemical, Inc Marietta, GA	No Bid	No Bid

√ Indicates recommended lowest responsive, responsive bidder.

Liquid Aluminum Sulfate (ALUM) is used at the City's two wastewater treatment plants for the purpose of phosphorous and barium removal as required in the facilities' NPDES permits. In the last year, WWTP#2 and WWTP#3 have combined to use approximately 450 dry tons of ALUM. The City's current contract is with USALCO Michigan Plant, LLC for \$459.00 per dry ton.

ALUM is not a commodity that is readily available from multiple sources in our area. Kemira Water Solutions indicated that they submitted a 'no bid' because they have not been competitive in ALUM sales in the Chicago area. However, with their 'no bid' they request the bid tabulation which they use for market research to gauge their competitiveness in future bids with the City. No one from C&S Chemical was available to discuss their 'no bid' submittal.

USALCO manufactures and ships ALUM from their plant in Michigan City, IN.

Recommendation:

The Public Works Department has reviewed all bids received for completeness and accuracy in accordance with the invitation to bid document. The Wastewater Treatment Division has utilized USALCO Michigan Plant, LLC, in the past and has received satisfactory products and service. It is the recommendation of staff to award a two-year contract for the provision of ALUM to the lowest responsible, responsive bidder, USALCO Michigan Plant, LLC, in the submitted bid amounts.

Votes Required to Pass:

Simple Majority

RESOLUTION

DRAFT

BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF CRYSTAL LAKE that the City Manager is authorized to execute a two-year Purchase Agreement between the CITY OF CRYSTAL LAKE and USALCO Michigan Plant, LLC for the provision of Liquid Aluminum Sulfate in the submitted bid amount.

DATED this _____ day of _____, 2013.

CITY OF CRYSTAL LAKE, an
Illinois municipal corporation,

By: _____
MAYOR

SEAL

ATTEST

CITY CLERK

PASSED: _____

APPROVED: _____



Agenda Item No: 13

**City Council
Agenda Supplement**

Meeting Date:

December 3, 2013

Item:

Lift Station SCADA Phase 1 Improvements

Staff Recommendation:

Motion to award the proposal for Phase 1 Supervisory Control and Data Acquisition (SCADA) system implementation for lift stations to the lowest responsive, responsible proposer, Baxter & Woodman Control Systems Integration, for final design, programming, and installation of hardware, and to adopt a resolution authorizing the City Manager to execute a service agreement with BWCSI in the amount bid with a 10% contingency for unforeseen expenses.

Staff Contact:

Victor Ramirez, P.E., Director of Public Works

Background:

The Water and Wastewater Divisions use Supervisory Control and Data Acquisition (SCADA) systems to monitor and control operations at all water treatment plants and wastewater treatment plants. Currently, the City's lift stations are monitored and controlled locally at the site with general alarms which are dispatched through an auto-dialer system to a cellular phone.

The remote access to view and control lift stations will streamline operations. SCADA is an operations tool, as staff can acknowledge alarms, view and operate various components of each lift station remotely. It is also a management tool as supervisors can have access to reports or the real time status of pumps turning on and off, wet well levels, generator run times, and overall station status. This ability to remotely identify issues, acknowledge alarms, make necessary changes in operations, and dispatch crews more quickly will allow for better overall operations of the Division, and provide an advanced level of service to the community.

Discussion:

On November 22, 2013, the City received proposals from four companies for lift station SCADA implementation. The base scope of work for the proposal consisted of project management, computer hardware and software, a master PLC, and eight sanitary lift stations with three optional lift stations should funding allow them to be included. The vendor costs are summarized on the following chart and have been calculated based on the City's projected use.

Company	Total Proposal
√BWCSI Crystal Lake, IL	\$198,180.00
Automatic Systems Co Ames, IA	\$225,626.00
Donohue Chicago, IL	\$251,046.04
Tri-R Systems DeKalb, IL	\$322,700.00

√ Indicates Most Responsive, Responsible Proposal

The integration of the Lift Station SCADA system was broken down into three phases. When the full project is complete, there will be 26 sanitary and three storm lift stations on this system. Phase 1 includes the installation and programming of the master programmable logic controller (PLC) in the Public Works offices, installation and setup of a master control computer, and integrating the first eight stations.

Recommendation:

The Public Works Department has reviewed the proposals for completeness and accuracy in accordance to the specifications provided in the RFP document and recommends awarding the contract to Baxter & Woodman Control Systems Integration. BWCSI has submitted the lowest responsive, responsible proposal that represents the best value to the City. The City has utilized BWCSI for the maintenance and trouble shooting of the water and wastewater SCADA systems and found them to be a very responsive and capable contractor.

Votes Required to Pass:

Simple Majority

RESOLUTION

DRAFT

BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF CRYSTAL LAKE that the City Manager is authorized to execute a Service Agreement between the CITY OF CRYSTAL LAKE and B&W Control Systems Integration for the Lift Station SCADA Phase 1 Improvements in the amount bid with a 10% contingency for unforeseen expenses.

DATED this _____ day of _____, 2013.

CITY OF CRYSTAL LAKE, an
Illinois municipal corporation,

By: _____
MAYOR

SEAL

ATTEST

CITY CLERK

PASSED: _____

APPROVED: _____



Agenda Item No: 14

**City Council
Agenda Supplement**

Meeting Date:

December 3, 2013

Item:

Wastewater Treatment Plant #2
Blower Room Motor Control Center (MCC)

Staff Recommendation:

Motion to award the proposal for Blower room MCC and installation work at Wastewater Treatment Plant #2 to the lowest responsive, responsible proposer, Marc Kresmery Construction, and adopt a Resolution authorizing the City Manager to execute a service agreement with Marc Kresmery Construction in the amount bid with a 10% contingency for unforeseen expenses.

Staff Contact:

Victor Ramirez, P.E., Director of Public Works

Background:

Earlier this year, the Blower Room Motor Control Center (MCC) panel at Wastewater Treatment Plant #2 (WWTP #2) had a circuit breaker fail. As the breaker was being replaced, the electrical stabs and buss bars on the MCC were found to be severely deteriorated. After considerable research, it was determined that parts were no longer available for the unit, which was installed in 1972.

The MCC powers all of the blowers which provide air to the aeration tanks. This is a critical component to the wastewater treatment process. Currently three of the four buckets in the MCC are operating. However, as a proactive measure to ensure the operation of the blowers, the MCC was budgeted for replacement.

On November 19, 2013, the City received proposals from two qualified vendors to perform the purchase and installation to the City's MCC. The project entails the demolition of the existing MCC, purchase and installation of a new MCC, and wire termination to all of the equipment. This price includes the cost for software, extended warranty, Arc Flash information/hazard tags, startup training, and the installation of a new concrete pad where the unit will be placed. The following is a breakdown of the total proposals received.

Proposer	
√ Marc Kresmery Construction Elgin, IL	\$ 171,710,00
Automatic Systems St. Paul, MN	\$ 178,740.00

√ Indicates the lowest responsive and responsible proposer

In addition to being publicly posted on Demand Star and published in the local newspaper, the Invitation to Bid was sent directly to eleven companies. Four attended the mandatory pre-bid meeting to review the project, and only two submitted a bid for the work. One of those that did not bid, Associated Electrical Contractors, indicated that the timeframe was too short to complete the project given their current workload. The other, Englewood Electric Supply, is a manufacturer representative who attended the meeting to provide equipment quotes to the contractors who would bid the project.

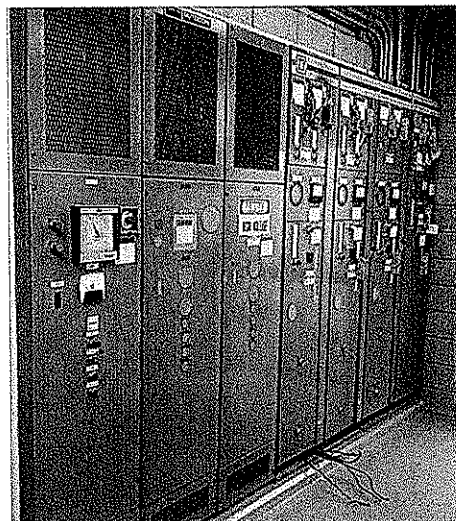
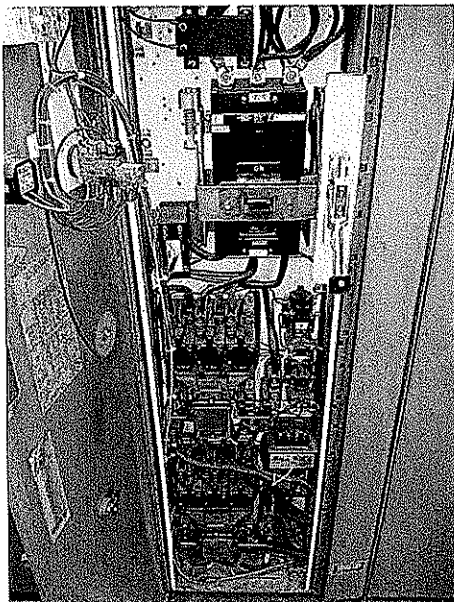
Recommendation:

Staff has reviewed the proposals submitted for completeness and accuracy in accordance with the specifications in request for proposals document, and recommends awarding the work for the Blower Room MCC replacement project to Marc Kresmery Construction. Marc Kresmery construction is currently working on the bio-solids building rehabilitation for the City, and has been very responsive to date. The new MCC is estimated to have a useful service life of at least 20 to 30 years.

There are sufficient funds in the FY 2013/2014 Budget for this expense.

Votes Required to Pass:

Simple Majority



DRAFT



RESOLUTION

BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF CRYSTAL LAKE that the City Manager be and he is hereby authorized and directed to execute an agreement with Marc Kresmery Construction for the Blower Room MCC replacement project at Wastewater Treatment Plant #2 in the submitted bid amount with a 10% contingency for unforeseen expenses.

DATED this 3rd day of December, 2013.

CITY OF CRYSTAL LAKE, an
Illinois municipal corporation,

By: _____
MAYOR

SEAL
ATTEST

CITY CLERK

PASSED: December 3, 2013
APPROVED: December 3, 2013



Agenda Item No: 15

**City Council
Agenda Supplement**

Meeting Date:

December 3, 2013

Item:

Engineering for Wastewater Treatment Plant #2 Aeration System Improvements

Staff Recommendation:

Motion to award the proposal for Engineering for Aeration System Improvements at Wastewater Treatment Plant #2 to the lowest responsive, responsible proposer, Baxter & Woodman Inc., and adopt a resolution authorizing the City Manager to execute a service agreement with Baxter and Woodman Inc. in the amount bid with a 10% contingency for unforeseen expenses.

Staff Contact:

Victor Ramirez, P.E., Director of Public Works

Background:

Wastewater Treatment Plant #2 (WWTP #2) currently has five blowers that are used to produce air which is piped into the aeration tanks. The air is needed at this point in the treatment process to keep the "bugs" that breakdown the solids alive. This project will replace one of the centrifugal blowers with an energy efficient turbo blower.

While staff has been reviewing the possibility of installing a turbo blower since 2010, this project is made possible by a grant opportunity through the Illinois Department of Commerce and Economic Opportunity (DCEO). Typical DCEO energy improvement grants for public agencies pay at a rate of \$0.12 per kw hour saved. Due to the magnitude and immediacy of the energy reduction generated by this equipment, turbo blowers are funded at a rate of \$0.36 per kw hour saved. The grant will cover the costs of the equipment and engineering (approximately \$229,000), leaving only the installation costs for the City to pay. When the electrical savings generated by this project are considered, the City's return on investment (ROI) for this project will be approximately 2.5 years. The new Turbo blower is estimated to have a useful service life of 20 years.

The main caveat to the project is the grant has a May 15, 2014 deadline. Since turbo blowers generally have a 20-week lead time across the industry, this makes the installation timeframe very tight.

On November 19, 2013, the City received three proposals to perform the engineering services necessary for the installation of a turbo blower at WWTP #2. The following is a breakdown of the total proposals received.

Proposer	
√ Baxter & Woodman Inc Crystal Lake, IL	\$37,710.34
Donohue & Associates Chicago, IL	\$39,420.00
Christopher Burke, Engineering LTD Rosemont, IL	\$ 30,740.00

√ Indicates the lowest responsive and responsible proposer

In their proposal, Christopher B. Burke did not identify any notable experience with turbo blower installations. In addition, their proposed timeline does not meet the grant timeline as it relates to turbo blower projects. Due to the critical timelines related to this project and the availability of \$229,000 grant funding, there is no margin for any type of delay. Therefore, they were not considered responsive to this project.

To meet the tight timeline that the DCEO has set, Baxter & Woodman has proposed a Design/Build project. This format will reduce design time, eliminate conventional bidding, and expedite equipment purchases, while maintaining the competitive pricing. B&W will work with the contractors and equipment suppliers to prepare a scope and lump sum cost to complete the project. Equipment and contractor pricing will be compared with the many previous similar projects that they have completed to confirm the City is receiving competitive pricing. The design/build contract will be presented to the City by January 2014.

The advantages to the City are a guaranteed price, engineering cost savings, quicker access to significant power savings and, most importantly, an expedited schedule.

Recommendation:

Staff has reviewed the proposed cost estimates submitted, and recommends awarding the work to Baxter & Woodman, Inc. Baxter & Woodman, Inc. is currently working on design engineering projects for the City at the wastewater treatment plants. However, staff has verified the references of Baxter & Woodman’s clients who have utilized the firm for Design/Build projects in the past, and have received favorable results. Therefore, it is the recommendation of staff to award the contract to Baxter & Woodman, Inc. in the submitted bid amount with a 10% contingency for unforeseen expenses.

There are sufficient funds in the FY 2013/2014 Budget for this expense.

Votes Required to Pass:

Simple Majority

DRAFT



RESOLUTION

BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF CRYSTAL LAKE that the City Manager be and he is hereby authorized and directed to execute an agreement with Baxter & Woodman, Inc. for Engineering for Wastewater Treatment Plant #2 Aeration System Improvements in the submitted bid amount with a 10% contingency for unforeseen expenses.

DATED this 3rd day of December, 2013.

CITY OF CRYSTAL LAKE, an
Illinois municipal corporation,

By: _____
MAYOR

SEAL
ATTEST

CITY CLERK

PASSED: December 3, 2013
APPROVED: December 3, 2013