



ST. CHARLES
SINCE 1834

AGENDA ITEM EXECUTIVE SUMMARY

Title: **Recommendation to Approve Well #4 Preventative Maintenance and Waive Bidding Process**

Presenter: John Lamb

Please check appropriate box:

<input type="checkbox"/>	Government Operations	<input checked="" type="checkbox"/>	Government Services 04.25.11
<input type="checkbox"/>	Planning & Development	<input type="checkbox"/>	City Council
<input type="checkbox"/>	Public Hearing	<input type="checkbox"/>	

Estimated Cost:	Not to exceed \$165,000	Budgeted:	YES	<input checked="" type="checkbox"/>	NO	<input type="checkbox"/>
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If NO, please explain how item will be funded:

Executive Summary:

Preventative maintenance is scheduled and completed every seven years to minimize the possibilities of un-timely emergency repairs. The work involves the removal of equipment and the anticipated repairs to restore the components to like new condition. This includes pump and motor, impellers, submersible cable and bowls. In addition there is a process called bore blasting that is used to increase the productivity of the well. Funds are budgeted in FY11/12 for work.

Staff requests waiving of bidding process for reason that Layne Western has performed all prior work on this well and others in the City. Contractor familiar with well site, equipment and system.

Attachments: (please list)

Proposal from Layne Western
Bid Waiver form

Recommendation / Suggested Action (briefly explain):

Request waiving of bidding process and recommend approval of Layne Western proposal to perform Well #4 preventative maintenance at a not to exceed cost of \$165,000.00.

For office use only:

Agenda Item Number: 6.f

LayneChristensenCompany

WATER RESOURCES DIVISION



April 12, 2011

Mr. John Lamb
Environmental Services Manager
City of St. Charles
2 East Main Street
St. Charles, IL 60174-1984

RE: Well No. 4

Dear Mr. Lamb:

We wish to submit this proposal following up my meeting with you and Paul Marschinke on April 1, 2011 regarding the plan we have for the 200 HP Byron Jackson submersible pump installed in the well.

We did a historical review of the records and comparison of the 1936 drilling records to our television survey in 1992 regarding the increase of the pump setting depth. It appears that the pump may be extended a maximum of 70 feet based on calculated actual bowl and motor length of 23-1/4 feet, which would have the bottom of the motor at 916 feet compared to an original record of 917.5 feet versus a t.v. survey of the top of the 12" liner reduction at 925 feet. A television survey will be performed after pulling the pump as a check on this.

The submersible power cable would be hypot tested, along with the Byron Jackson flat cable motor lead assembly. A total of 500 feet of new 8" epoxy coated Schedule 40 API Line Pipe would be furnished and would include the 70 foot column extension. Two 8" column surge valves would also be supplied as these are replaced every time. If less than 500 feet of new column is required, the cost of the project would be reduced by \$57.00 per foot for the epoxy coated Line Pipe not used.

The present Byron Jackson 11" MQH, 13 Stage cast iron bronze-fitted bowl assembly was rebuilt 6 years ago and was known to have had some significant pits at that time as well as prior service life observed in Well 4 for these cast iron bowl castings confirms the pump requires replacement. We will have the bowl stage castings, bronze impellers, and top and bottom bowl special castings in our Aurora inventory to make up a new complete bowl assembly in our machine shop using the stock parts on hand.

To obtain an all-bronze complete new bowl assembly would take 20 weeks to have on hand at an extra cost of \$81,517.00, which is not practical with the summer pumping season looming ahead! The present 200 HP Byron Jackson, 14" Type H, 460 Volt

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Mr. John Lamb
Environmental Services Manager
City of St. Charles
April 12, 2011
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submersible motor megger tests very high and should be able to be reused. We would perform a complete BJ motor shop service with sandblasting of the case, disassembly and replacement of the internal oil filter and balance tube, along with reassembling using new o-rings, epoxy coating the exterior of the motor and refilling with BJ motor oil.

The acid flush of the well was performed and two 4,000 gallon loads had been pumped to the neutralization tanker before the pump was locked up by sand. We are including the BoreBlast nitrogen high pressure impulse treatment of the Galesville sandstone to help loosen up and flush out any remaining material in the formation to improve the efficiency and Specific Capacity of the well. We have included the BoreBlast work and two days of bailing following the BoreBlast. Labor and equipment for removal and reinstallation of the pump, along with hauling the complete pump into the Aurora repair facility for work on the column and motor, and then returning to the job is included, as is the t.v. survey and hypot testing we have mentioned. The 350 MCM submersible power cable extension is also included, along with new airlines and miscellaneous supply items.

The total project cost for the work as detailed is \$153,826.00.

We will target starting the work within 5 days of a purchase order receipt, which we understand may be May 3.

Our standard labor and equipment Work Order rate schedule is attached outlining rates that would apply if unplanned well work beyond the scope is ordered.

We appreciate the opportunity to submit this proposal for additional work for the City of St. Charles.

Sincerely,

Layne Christensen Company



Gregory D. Buffington, P.E.
General Manager
Great Lakes Region

GDB/mcw



REQUEST FOR WAIVING BID PROCEDURE

We request the City Council to waive the bid procedure and accept the quotation (requiring two-thirds City Council vote) submitted by:

Layne Western Company
721 W. Illinois Avenue
Aurora, IL 60506

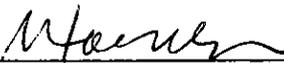
For the purchase of: Service for preventative maintenance and repair of Well #4. At a cost not to exceed: \$165,000.00

Reason for the request to waive the bid procedure: Layne Western has performed all prior work on this well and others in the City. Contractor familiar with well site, equipment and system.

Other Quotations Received: None

Date: 4/25/2011

Requested by: John Lamb

Department Director: 

Purchasing Manager: _____

Committee Chairman: _____

THIS REQUEST FORM MUST BE SIGNED BY ALL PARTIES PRIOR TO REQUESTING COMMITTEE APPROVAL FOR WAIVING OF THE BID PROCEDURE. REQUESTS FORWARDED DIRECTLY TO THE CITY COUNCIL (AND BYPASSING COMMITTEE) MUST BE SIGNED BY ALL PARTIES PRIOR TO REQUESTING CITY COUNCIL APPROVAL. SUCH REQUESTS ARE TO BE OF AN EMERGENCY NATURE WHERE TIME IS OF THE ESSENCE.