



Water, Sewer, and Solid Waste Committee

May 12, 2020

5:30 P.M.

(Or immediately following Equipment Committee Session)

This is a Virtual Meeting

Committee: Chairman Mark Kinion; Council Member Sonia Gutierrez, Council Member Sloan Scroggin, Council Member Teresa Turk

Copy to: Mayor Lioneld Jordan, Paul Becker, Kara Paxton, Susan Norton, Chris Brown, Alan Pugh, Terry Gulley, Peter Nierengarten, Jeff Coles, Brian Pugh, Mark Rogers, Corey Granderson, Aaron Watkins, Greg Weeks, Matthew Benton, Tim Luther, Todd Williams, Adrian Romero Flores, Chris Buntin, Ashley Pifer

From: Tim Nyander, Utilities Director

CALL TO ORDER

ROLL CALL

OLD BUSINESS:

1. Presentation of Biosolids Master Plan Workshop #4

The City continues in their efforts to evaluate the solids handling facilities and develop appropriate criteria for sizing and technology solutions for the future. Jacobs staff will present an update on the recent workshop as well as the project in general.

INFORMATION ONLY

2. Paul R. Noland WRRF Electrical Upgrades

On April 22, 2020, the City of Fayetteville accepted sealed competitive bids for the Noland WRRF Electrical Installation project. Midland Industrial Services, LLC of Rogers, AR submitted the lowest bid of \$1,036,491.85. All bids are shown here:

Axis Electric, LLC	\$1,719,300.00
Fleming Electric, Inc.	\$1,431,000.00
<u>Midland Industrial Services, LLC</u>	<u>\$1,036,491.85</u>
Multi Craft	\$2,217,278.50
Oil Capital Electric	\$2,008,704.00

The electrical systems and components at the Noland WRRF are aging, do not meet modern safety codes, and need frequent repair. A comprehensive design of necessary upgrades was completed by Allgeier, Martin and Associates, Inc. and the project will be constructed in two phases. This phase includes the higher-voltage components.

Staff recommends awarding Bid #20-30 and approving a construction contract with Midland Industrial Services, LLC in the amount of \$1,036,491.85 for construction of critical electrical upgrades at the Noland Water Resource Recovery Facility. Funds were budgeted and are available for this project in the WWTP Building Improvements account.

**STAFF REQUESTS THIS BE FORWARDED TO THE CITY COUNCIL FOR
CONSIDERATION FOR APPROVAL**

3. Solar House Repair

On May 18, 2019, a severe storm passed through the Fayetteville area, damaging the roof panels on the far interior end of every solar house, as well as structural damage to several air intake doors, end caps, roof caps, and metal battens.

A qualified inspector from the solar house manufacturer as well as the original installer performed a thorough inspection and found that 90% of the roof panels had been comprised; broken thru or cracked around the fasteners. The drying efficiency has been lost and the rainwater that enters through the damaged roof causes the biosolids to go septic and release odors, affecting BMS neighbors. The cost of repair to the solar houses are \$618,319.61, plus a contingency of \$61,832.00, for a total of \$680,151.61.

INFORMATION ONLY

NEW BUSINESS:

4. Presentation of the Water Quality Report from Garver, Inc.

Resolution 142-18 authorized Garver, LLC to study the City of Fayetteville's potable water distribution system with the goal of identifying improvements to overall water quality parameters such as water age, chlorine residual, and disinfection byproducts. The study made several key findings and recommendations. Chris Buntin from Garver will present and take questions from the committee.

INFORMATON ONLY

5. Design of the Water Boosting Station for Kessler Mountain

The most immediate recommendation from Garver's Water Quality Report was the addition of a booster pumping station to allow the Kessler ground storage water tanks (two tanks @ six-million gallons each) to fill and drain more efficiently, thereby decreasing water age and improving water quality.

Due to the location, size, and hydraulics of the City's water system, the Kessler ground storage tanks struggle to 'fill' completely thereby reducing standby water available for

maximum demands and emergencies. However, the tanks also experience low demand. The pumping station proposed would help to fill the tanks completely, but also keep the water mixed and sent timely to customers, reducing overall water age.

A formal selection committee was held on March 10, 2020 and Garver, LLC was selected to perform these design services. An engineering contract, scope, and fees have been prepared and reviewed by city staff. The design and bidding phases are not to exceed \$311,600.00. At time of bid award, additional construction phase engineering services would be necessary as an amendment.

Staff recommends approval of an Engineering Services Agreement with Garver, LLC for design of a booster pumping station for potable water located at the Kessler Mountain ground storage tank site as recommended in the 2020 Water Quality Study performed by Garver, LLC. Funds are available in the Water System Rehabilitation/Replacement account.

**STAFF REQUESTS THIS BE FORWARDED TO THE CITY COUNCIL FOR
CONSIDERATION FOR APPROVAL**

6. Pressure Management Design in the Clabber Creek Area

Resolution 133-18 authorized Black & Veatch to perform a detailed water audit for the City of Fayetteville, identifying several recommendations to help reduce unbilled water-loss. One key recommendation from this study was to identify areas of town that could have excessive pressures reduced, thereby reducing frequency of line-breaks and background water leaks. The greater Clabber Creek residential area north of Mt. Comfort Road and west of Deane Solomon Road has been identified as a target area for pressure reduction.

A formal selection committee was held on March 10, 2020 and Black and Veatch Corporation was selected to perform these design services. An engineering contract, scope, and fees have been prepared and reviewed by city staff. The engineering analysis, design, and bidding phases are not to exceed \$107,592.00. At time of bid award, additional construction phase engineering services would be necessary as an amendment.

Staff recommends approval of an Engineering Services Agreement with Black and Veatch Corporation not to exceed \$107,592.00 for analysis and design of potable water pressure management solutions for the greater Clabber Creek area. Funds are available in the Water System Rehabilitation/Replacement account.

**STAFF REQUESTS THIS BE FORWARDED TO THE CITY COUNCIL FOR
CONSIDERATION FOR APPROVAL**

7. Stewardship Costs with the Northwest Arkansas Land Trust for the Westside Prairie

For every conservation easement Northwest Arkansas Land Trust holds, they are required by their Accreditation Standards and sound best practices to have money for the long term protection and enforcement of the conservation easement. These funds reimburse the Land Trust for the up-front due diligence, legal fees, and staff time associated with work before the easement closes, and the remainder goes into a long term stewardship fund. This fund

helps pay for perpetual monitoring of the property (NWALT monitors all conservation properties annually) and contributes to a legal defense fund which allows the Land Trust to pay legal fees if the easement were to be violated. In short, the Stewardship Contribution helps the Land Trust cover the costs with assuming the liability of protecting the property forever.

**STAFF REQUESTS THIS BE FORWARDED TO THE CITY COUNCIL FOR
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8. West Side Post-Aeration W3 Pump #4 Repair

In fall of 2016, W3 Pump #4 failed vibration testing and was taken out of service. At the time, the pump was not immediately repaired due to redundancy, but now only 1 out of 4 West Side W3 pumps is operational. This pump supplies W3 wash water to critical plant processes and equipment including the band screen, belt presses, and the odor control system.

The pump was recently sent to JCI Industries out of Joplin, MO for a hidden-damages inspection. We have a quote for **\$20,721.00** (shipping included). We believe this item qualifies for a sales tax exemption as specified by the Arkansas Department of Finance Arkansas Tax Rules – Section GR-66E because it supplies wash water to multiple solid removal processes at the WRRF. If needed, sales tax will be \$2,020.30 for a total cost of \$22,741.30.

**STAFF REQUESTS THIS BE FORWARDED TO THE CITY COUNCIL FOR
CONSIDERATION FOR APPROVAL**

9. Noland Effluent Pump Station Pump #2 Repair (2020 Scheduled CIP)

Recently W3Pump #2 at the Noland Effluent Pump Station stopped working. This pump was originally installed in 2007.

This pump conveys W3 water used in the treatment process to multiple locations at Noland and BMS including the biosolids dryer, irrigation reels, and Influent Pump Station #1.

The pump was pulled and sent to JCI out of Joplin, MO for a hidden-damages inspection. The inspection found a broken head shaft, a cracked suction bell bushing, and extensive wear and corrosion to various components.

We have a quote from JCI for **\$25,776.00** (shipping included) to repair the pump. We believe this item qualifies for a sales tax exemption as specified by the Arkansas Department of Finance Arkansas Tax Rules – Section GR-66E because it supplies W3 water to the BMS biosolids dryer, seal water to influent pump station, and W3 water for washing down Noland's secondary clarifiers, belt presses, and band screens. If needed, sales tax will be \$2,513.16 for a total cost of \$28,289.16.

**STAFF REQUESTS THIS BE FORWARDED TO THE CITY COUNCIL FOR
CONSIDERATION FOR APPROVAL**

10. Noland Effluent Pump Station Pump #4 Repair (2020 Scheduled CIP)

Effluent Pump #4 at the Noland Effluent Pump Station has been out of service since 2018 after developing a leak from the packing seal. This pump was originally installed in 1988.

This pump moves W3 water to various locations at Noland and BMS for use in the treatment process including the BMS biosolids dryer and irrigation reels, the Noland influent pump station, and the Noland secondary clarifiers.

We have a quote from JCI for **\$29,559.00** (shipping included) to repair the pump. We believe this item qualifies for a sales tax exemption as specified by the Arkansas Department of Finance Arkansas Tax Rules – Section GR-66E because it supplies W3 water to the BMS Biosolids Dryer, sends seal water to Influent Pumping Station #1, and because it provides W3 water for washing down Noland's secondary clarifiers, belt presses, and band screens. If needed, sales tax will be \$2,882.01 for a total cost of \$32,441.01

11. Capital Projects Update

Discussion of current capital projects in the design state or underway.

12. Overview of WWTP Monthly Report

Discussion of March's Monthly WWTP Report

PRESENTATIONS

Biosolids Master Plan Update
Water Quality Report – Garver

ATTACHMENTS

Midland Recommendation & Bid Tabulation
Thermal Process Systems Contract
Garver Contract
Pressure Management – Clabber Creek
NWA Land Trust
JCI Pump Quotes
Capital Projects Update
WWT – March 2020 Report

ADJOURN

Next Water, Sewer, Solid Waste Committee meets on
Tuesday, June 9th, 2020, 5:30 p.m.