Albemarle County Service Authority

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MEMORANDUM

To: Albemarle County Board of Supervisors
From: Gary O'Connell, Executive Director
Date: March 27, 2020
Re: Albemarle County Service Authority (ACSA) Quarterly Briefing
cc: Mr. Jeff Richardson, County Executive; ACSA Board of Directors; ACSA Leadership Team and Managers

Thank you for the continuing opportunity to share with the Board of Supervisors what is happening at your water agency, the Albemarle County Service Authority. We pride ourselves on safe, clean, reliable Albemarle water. In this time of uncertainty with the Covid-19 Coronavirus spreading, we at the ACSA are very focused on maintaining a high quality of water, continuing to be very reliable, and being responsive to our customer needs. Here are some updates from the ACSA:

1. **Emergency Operations and Pandemic Plan** – As I write this the country, our state and the Albemarle community are seeing massive impacts on our way of life due the Covid-19 Pandemic. We can assure you that the ACSA is doing all in our power to continue to provide safe drinking water and meet customer service expectations. We are supporting our treatment partner RWSA as a backup when needed to assure the adequate treatment of drinking water (and wastewater treatment) for the community. The following is a letter we have published for our customers on what the ACSA is doing during this emergency:

"Along with the rest of the country, we at the ACSA have been closely monitoring the dynamic situation surrounding the COVID-19 Pandemic. First and foremost, the health and well-being of our staff and customers, and the safety of your drinking water remain our highest priorities. To be clear, the COVID-19 coronavirus does not affect the quality of your drinking water. The Centers for Disease Control and Prevention (CDC), the World Health Organization and the U.S. Environmental Protection Agency have produced information on their websites stating that multi-barrier water treatment and disinfection processes, like the ones used to produce for your water, remove or inactivate viruses. Your public drinking water is safe to drink and use to keep you healthy.
The ACSA will continue to act thoughtfully and thoroughly, ensuring the reliable delivery of our services and reducing the disruption and uncertainty COVID-19 brings to our daily lives. As part of the Albemarle community, we are navigating this situation flexibly and responsibly, learning and adapting as new information is made available.

Things seem to be changing every day and there are a lot of unknowns. However, we have already taken a series of precautionary steps in response to this emerging public health impact, and we will continue to do so. We are following guidance from the CDC and the Virginia Department of Health and are also in regular communication with our suppliers to make sure we are supporting the needs of our water services.

All of us at the ACSA share a great deal of pride in how we deliver our services; we'll continue to do what is right for our customers and employees. Our hope – as always – is that after this pandemic is over, our staff will look back and say, "We made it through this unprecedented moment and kept bringing safe, clean water to all our customers' taps."

While this is a difficult situation, we are optimistic this will be a temporary situation. Guided by our core value of public service – "serve and conserve" – and a commitment to the communities we serve, we will continue to communicate transparently with our customers and act responsibly with our local and state officials to ensure the health and well-being of the people we serve and employ.

The communities we serve are powerful; we know we are not tackling this alone. We join with you in practicing social distancing and other important measures as much as possible so we can make the biggest impact on reducing the spread of the virus that we can. For continuing updates, I invite you to visit our website – www.serviceauthority.org – and follow us on Twitter, Facebook, or Instagram."

2. **Customer Accounts and Customer Service** – We recognize this is also a difficult time for many of our customers financially. Beginning on Monday, March 23 we stopped any service disconnections, stopped sending out final notices, giving credit on on-line credit card payments, and waiving some other fees. We are trying to be sensitive to customer concerns over job loss and business closings Some assistance programs are already being established in the community that we hope to connect with. We are also encouraging customers to pay their bills on-line, as well as by postal mail and phone, and we still have a customer payment drop box at our offices. We continue to maintain a very responsive customer service call center and on-line response, 24/7. We are staffing to be able to very timely respond to customer calls and water and sewer emergencies as essential services.

3. **AMI (Advanced Metering Infrastructure)** – One of our Strategic Plan major initiatives is to utilize the various AMI technologies that are available in the water metering world. Most medium and large sized water utilities have already converted to the AMI technology. A vendor has been selected, and the Board has approved the contract to move the project forward. A tremendous advantage with AMI is immediate leak detection inside the customer's home or business, or water service line, a tremendous water conservation and cost savings tool. In our Customer Survey, over 97% of the respondents found it important to have leak notification. We also will be adding a new customer "portal" online feature for a customer to track their water use, and modern bill payment options. We continue to work on this project to move it forward but considering current events the project is now taking a lower priority. Our original schedule would have had us conducting the initial field testing in April but that will be pushed back to a new schedule given the events going on with Covid-19. We will be offering an "Opt Out" for customers who do not wish to participate.

4. **CMMS – Computerized Maintenance Management System** – This system for customer service requests, work orders, inventory and asset management is part of our Strategic Plan to improve how we manage our day to day operations and will utilize the CityWorks software program. This is one of those projects that is not so visible but has the potential to greatly improve our operations to deliver better customer service, productivity and scheduling. We will also have a web portal/mobile app for customer requests in place at the completion of the project, which we expect to finish by the summer. Given current events this project taking a lower priority, but we continuing to work on implementation.

5. **ACSA Capital Projects Update** – The adopted FY 2020 Capital Improvements Program (CIP) started July 1st and is a $10.4 million program (let us know if you would like any detailed project maps or to schedule a tour on any of the projects). Highlights and current major projects are detailed below:

   - **Operations Center Expansion Study (Master Plan)** – A study has been completed to look at the short and long-term future of ACSA properties (Crozet, Avon Street, and Pantops), and develop a master plan for the long-term needs of the organization as we continue to grow and add customers. Additional Pantops office parking is scheduled for construction this spring
   - **Camelot Water Main Replacement** – Replacement of nearly 50-year-old water mains that are also undersized and deteriorating and becoming unreliable. Easement acquisition is complete. Project has been advertised for bid.
   - **Scottsville Water Main Replacements** – Replacement of an aging water main along East Main Street. Work has begun on this project, with about 10% of the water main installed.
   - **Peter Jefferson Place Pump Station Improvements** – This pump station is operating inefficiently. The pumps have been replaced, as has piping and electrical work been completed. A new generator is also part of the project for reliability.
   - **Madison Park Pump Station Upgrade** – Constructed 33 years ago, by a private development, and the original equipment is wearing down, building undersized, and not able to install SCADA (computerized monitor). The plan is to replace this pump station on-site. Design work is at the 60% stage.
   - **Oak Forest Sewer Pump Station Abandonment –** This is an aging pump station in need of rehabilitation. With the adjacent Stonefield development, we now have the opportunity to extend a sewer main via micro-tunnel and eliminate this aging pump station and avoid an expensive upgrade. Project is under contract.
   - **Jefferson Village Water Main Replacement –** Replacing older (49 years) water mains made of inferior pipe product. Since originally part

of a former well system, many of the mains are undersized. Design is at 90% completion.

- **Meriwether Hill Water Main Replacement –** This water main is reaching the end of its useful life and is in need of replacement. This is another of the former well system mains. Water main replacement work is completed. Some paving work being coordinated with VDOT.
- **Pantops Sewer Study –** Area study to reduce wet weather infiltration and inflow (I/I). This study will likely lead to targeted sanitary sewer system rehabilitation. Flow monitoring and manhole inspections have been completed, and the investigation portion of this project, including robotic televising of the sewer lines, has been completed. A final report has been submitted on needed rehabilitation.
- **SCADA (computerized monitoring)** – A three phased project is nearing completion for over 40 water and wastewater facilities in the ACSA system. This is another of our projects to provide emergency alerting and monitoring to assure reliable water and wastewater service. We have completed the second phase of work, with the third phase design being completed to allow us to hire a contractor through a competitive negotiation process.
- **Crozet Phase IV Water Main Replacement** – Our Strategic Plan calls for the eventual replacement of all asbestos-cement water mains in our system, as they are older and made of a weaker material than the current industry norm. This project continues our systematic program to replace the aging and undersized water mains in the Crozet Water System. This is the fourth of five phases that have been defined to carry out these improvements and is currently in design phase at the 50% stage.
- **Hessian Hills Water Main Replacement** – The water mains in the Hessian Hills area have major deterioration, and they are also undersized throughout most of the subdivision. This project follows our Strategic Plan goal to replace aging and undersized water mains throughout our system. It will also eliminate a small amount of plastic pipe installed in the early 1980's. Design work is at the 100% stage, with project completion planned for 2021. A community meeting was held in late November. Work along Barracks Road and Georgetown Road will have to take place at night due to high traffic volumes during the day.
- **Hollymead Sewer Study** – ACSA staff has identified other large drainage basins to be evaluated for infiltration and inflow (I/I) to continue our efforts to maintain the integrity of our wastewater collection system. This study area includes the oldest portions of the Hollymead Subdivision, as well as, the offsite portion of the sewer main that serves the westernmost area of Forest Lakes South. The Forest Lakes Offsite Sewer will be the primary collector for the upcoming Brookhill development, and an evaluation of this trunk main will provide an excellent baseline of pipe integrity in advance of the future construction activities around this sewer. All of the manholes have been inspected, flow monitoring continues, and smoke testing to be completed.

- **Redfields Sewer Pump Station Abandonment** – This wastewater pump station was constructed 23 years ago by private development and the parcel is too small to add an emergency standby generator. The Maintenance Department must rely on a portable pump to operate this station during power outages. With the development of Wintergreen Farm Subdivision, ACSA staff saw an opportunity for a sewer main extension that could eliminate this pump station. Now that the sewer main extension is in place the timing is perfect for abandoning this wastewater pump station. Construction is underway with 75% of the work completed.
- **Vulnerability Assessment** – As part of an on-going emergency preparedness program, the ACSA is in a multi-phase effort to reduce risk and increase resilience**.** Projects include additional security measures, fencing and access gate enhancements, cybersecurity measures, additional tank protection, etc.
- **Sewer Force Main Condition Assessment** – This project utilizes a computerized "SmartBall" that is flowed through the force main capturing assessment data (via acoustic monitoring technology) to determine any problem areas that require correction or further detailed investigation.
- **Energy Audit:** This project will consist of a comprehensive energy audit of the Operations Center and all pump stations (20). It will evaluate current energy consumption and the factors that drive it, as well as, an analysis of utility rate structures to identify potential cost savings. Surveys will be conducted of all systems, including operation and maintenance procedures to determine where energy conservation can be improved.
- **Avon Street Maintenance Yard:** The Avon Street property has long been held as a future location to build additional facilities in a central location, as needed. The current Maintenance Yard at our Pantops Operations Center is becoming overcrowded with equipment and materials, causing us to relocate some equipment and larger materials to the former ACSA Maintenance Yard at the Crozet Water Treatment Plant, which we lease from RWSA. This project will begin to develop the ACSA owned Avon Street property into a much larger vehicle and materials storage facility. We are in consultation with Albemarle County Planning staff on this project proposal.
- **Ragged Mountain Phase 1 Water Main Replacement:** This project will replace the oldest active water main remaining in our system, which was part of the water main that served customers out Reservoir Road. This cast iron pipe is over 90 years old and is severely tuberculated, which greatly reduces the flow capacity in this section.
- **Northfields Water Main Replacement:** This project addresses the goal in our Strategic Plan for the eventual replacement of all asbestos-cement water mains in our system. The existing water mains are approximately 54 years old and have reached the end of their useful life. As a former well system that was connected to public water, most of the mains are also undersized.
- **Ednam Water Storage and Northfields Tank Recoating:** As part of our regular water storage tank cleaning and inspections it was

determined that these tanks were exhibiting generalized degradation of the paint coating on either the interior or exterior surfaces. The Ednam Tank was constructed in 1977 and was last painted in 1997. The original Northfield Tank was replaced in 2000 when the pump station was renovated. To be proactive in extending the useful life of our water tanks, we are moving forward on the Ednam and Northfields Tanks to be recoated. Ednam Tank recoating is completed, and back in service in early December. The Northfields Tank recoating project is completed.

- **Exclusion Meters Replacement:** In the mid 1990's with the development of Glenmore, many new customers installed irrigation systems for their properties and wanted to have their sewer bills reduced by the amount of water that was diverted to irrigate their properties. Private meters were installed behind their ACSA meter to record this volume and it was "excluded" from the calculation of their sewer charges and these became known as exclusion meters. On January 1, 2006 the ACSA Rules and Regulations were modified to no longer allow exclusion meters and required that all future irrigation meters would be tapped separately off our water mains, to be owned and controlled by the ACSA. There are 459 exclusion meters in the ACSA system. This project is a multi-year replacement program by our in-house CIP Crew to install dedicated, ACSA owned irrigation meters that will eliminate all remaining private exclusion meters in our system.
- **Pipe Saddles Replacement:** The ACSA Maintenance Department has discovered in recent years that pipe saddles used to make water service line connections to PVC water mains have been failing. Either the zinc-coated straps or the cast iron saddle bodies are deteriorating. This project is a multi-year replacement program to be undertaken with our in-house CIP Crew.

Let us know if you have further questions or comments. We are more than glad to meet with you about any of our projects, or facilities, or provide a tour if that would be useful.