

BOARD OF DIRECTORS' MEETING

October 19, 2023 9:00 A.M.

AGENDA

This meeting is being held pursuant to and in compliance with Va. Code Section 2.2-3708(3). The ACSA Board of Directors is responsible for receiving public comment. The opportunities for the public to access and participate in the electronic meeting are as follows: Join the meeting virtually through Zoom by visiting our website at www.serviceauthority.org; call in and leave a message prior to the meeting at (434) 977-4511, or email the Board prior to the meeting at board@serviceauthority.org.

9:00 a.m.	1. Call to Order and Establish a Quorum –Statement of the Board Chair
9:05 a.m.	2. Employee Recognition – Michael Lynn – Retirement – 46 Years of Service
9:15 a.m.	3. Approve Minutes of September 21, 2023
9:30 a.m.	4. Matters from the Public
9:40 a.m.	5. Response to Public Comment
9:50 a.m.	6. Consent Agenda
	a. Monthly Financial Reports
	b. Monthly Capital Improvement Program (CIP) Report
	c. CIP Authorizations
	d. Monthly Maintenance Update
	e. Rivanna Water and Sewer Authority (RWSA) Monthly Update
	f. ACSA Board Policy Issues Agenda 2023
	g. Advanced Metering Infrastructure (AMI) Project Update
10:05 a.m.	7. Customer Information System (CIS)
10:30 a.m.	8. PFAS (per- and polyfluoroalkyl substances) Proposed Class Action Settlement
10:55 a.m.	9. Corporate Roles & Responsibilities – Proposed Bylaws Change & Resolution
11:15 a.m.	10. Items Not on the Agenda
	11. Adjourn



ALBEMARLE COUNTY SERVICE AUTHORITY STATEMENT OF CHAIR TO OPEN OCTOBER 19, 2023 MEETING

This meeting today is being held pursuant to and in compliance with Va. Code Section 2.2-3708.3.

The opportunities for the public to access and participate in the electronic meeting are posted on the ACSA's website. Participation will include the opportunity to comment on those matters for which comments from the public will be received.

1	The Board of Directors of the Albemarle County Service Authority
2	(ACSA) met in a regular session on September 21, 2023, at 9:00 a.m. at the
3	Administration and Operations Center at 168 Spotnap Road in
4	Charlottesville, Virginia.
5	Members Present: Mr. Richard Armstrong, Chair; Dr. Lizbeth Palmer; Mr.
6	John Parcells; Mr. Clarence Roberts; Ms. Kim Swanson; Mr. Charles Tolbert,
7	Vice-Chair.
8	Members Absent: None
9	Staff Present: Roland Bega; Mike Derdeyn; Brendan Ganz; Quin Lunsford;
10	Jeremy Lynn; Michael Lynn; Gary O'Connell; Emily Roach (virtual); Danielle
11	Trent; April Walker (virtual).
12	Staff Absent: None
13	Public Present: Neil Williamson, Free Enterprise Forum
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15	1. Call to Order and Establish a Quorum – Statement of Board Chair
16	Mr. Armstrong called the meeting to order. He then read the opening
17	Board Chair statement (Attached as Page), and a quorum was
18	established.
19	2. Approve Minutes of August, 17 2023
20	Mr. Parcells said that on page 8 of the booklet at line 17, he was
21	puzzled by the offsite characterization and wondered what was meant by
22	that. He read, "they were able to identify at that point any larger scale
23	projects which may require offsite or involve RWSA."
24	Mr. Lunsford asked what page that was on.
25	Mr. Parcells replied that it was on page 6 of the minutes and page 8
26	of the booklet, line 17.
27	Mr. O'Connell asked if Mr. Lynn knew the context.
28	Mr. Lynn said it was offsite easement, maybe.
29	Mr. O'Connell said that was what Mr. Morrison said, but whether they
30	could explain it for him was a different matter.

Mr. Derdeyn said he thought Mr. Lynn was right, it was offsite easements.

Mr. Parcells said that he would request that the word "easement" be added. He said that on the same page, line 26, it states that "Stonefield had a different name, and that was a debacle of communication." He said that he could make an assumption, but he asked if the name mix-up meant that there was back and forth and that caused it.

Dr. Palmer said that was her statement and she did not explain her sentence clearly. She said that for the record, when she very first got on this Board, there was a miscommunication between the County and ACSA which resulted in insufficient sewer capacity for Stonefield. She said that it was a big to-do, and they had to increase the Meadow Creek Interceptor quicker than they probably would have done before. She said that it turned out that the property was sold and was not developed for a while, which gave the Service Authority time to do that. She said that she probably should not have brought that up without explaining the entire thing, but her comment was that since that time, in her impression, they had become a lot better at communicating with the County. She said that it was shocking to her because it was one of her first meetings to discuss this. She said that no one figured out whose fault it was, but the communication was not done as well as it should have been and created some anxiety.

Mr. Parcells asked that the language "debacle of communication between ACSA and the County" be added.

Dr. Palmer said they could add it to this one.

Mr. O'Connell said that they could add it to this meeting. He said that one thing that was significantly better was that all the discussion is happening early on. He said that it used to be way down in the process when things were pretty far along from the development community's standpoint in working with the County. He said that it was so far down that there was not a lot of time, but now it was early on, at the pre-application stage, the conversations that go on to make sure the development team and the County

all get in sync. He said that it had worked much better, and there were formal and informal processes for that as well.

Mr. Parcells said that he had noticed that in a number of references, what he described was described. He said that it was not necessarily today, but he had seen that characterization of communication being much better, so that was great. He said that on page 15, line 8, the minutes read "Mr. Barrow is referring to ally meters in the system.", and he was not sure what that meant.

Mr. Lunsford said that an ally meter is a type of meter. He said that the majority of their system was made up of IPerl meters. He said the ally meter has been strategically placed at about 50 different locations throughout the service area, which gives them the ability to monitor the pressure and temperature of those locations; it is a slightly more advanced meter for tracking some different metrics.

- Mr. Parcells asked if it was called an ally meter.
- Mr. O'Connell said yes, it was an ally meter.
- Mr. Parcells said that they should proper noun it, capital A-I-I-y. Mr. Parcells said that there was a typo on page 17, line 28, "incredibly" should be "incredible," and at the end of the sentence, "there was" should be "there were." He said that then, in line 31, "that one site being," then the next phrase, "the site being" should be the leader.
- Dr. Palmer said that she had a few comments. She said that she was really torn with these minutes because they were verbatim, and they did not always speak as clearly as they would like to, which becomes very clear in these. She asked if some voices were heard more clearly than other voices.
 - Ms. Trent answered yes.
 - Dr. Palmer said that was a complaint she has heard many times.
- Mr. O'Connell said that he was not at the last meeting, but yes, that was part of the issue. He said that they would notice that occasionally there was a wrong name there, because there is still a familiarity issue going on in terms of who is saying what.

1 Dr. Palmer said that page 9 at the bottom was a good example of 2 3 4 5 6 7 8 9 10 11 12 13 14

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some of the things that she just did not know that they should be correcting. She said that line 28 said "Dr. Palmer assumed that many of the trainings were not relevant for to the organization." She said that she could see herself saying "for the organization" and then switching her thought process and saying "to," but it looked like a typo, and she was not quite sure how to handle that because she could not swear that she did not use those two words, so she was not necessarily trying to correct these things but was pointing out that these minutes were harder to read because there were multiple places in there where all of them could do a better job with less words, and she was one of those people. She said that she was not asking to correct it but was just making a comment about how much more difficult they were to read because of that.

Mr. O'Connell said that they should also focus on too, this was that literal versus the effort it took to kind of massage everything, is making sure that where there is an action, that that is absolutely very clear in the rest of the context, because if that was not written correctly, then they could have some issues.

Mr. Derdeyn said that it also just raised what they were doing here with regard to these minutes, which was the point that was made, that they may have said that, in which case they did not have to actually amend the minutes. He said that Mr. Parcells had raised a couple of points where there was some context that was missing that had now been explained. He said that the Board will have to decide when they review these minutes, if they are asking to amend them or do they want them to be supplemented with context in this week's minutes that explained last month's minutes. He said that was something the Board ought to decide so that they knew how they were approving the minutes, whether they were to be supplemented with contextual explanation that they were having today.

Dr. Palmer asked if it was possible that the clarifications be included as asterisks at the end of these minutes that referred back to them, so it was

all together in one set of minutes. She said that it would be more meaningful

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2	if people go back to refer to the minutes. She said she had spent a lot of time
3	going back to the Board of Supervisors minutes to understand what people
4	were thinking at that time, and if something was not in that set of minutes,
5	she would not know that it was clarified the following meeting.
6	Mr. Derdeyn asked if there should be footnotes.
7	Dr. Palmer said that it might be the easiest thing to do.
8	Mr. Derdeyn said that it would keep them self-contained to the
9	minutes, but it was ultimately up to the Board.
10	Dr. Palmer stated that adding footnotes would be the suggestion she
11	would make to the Board. Mr. Armstrong asked if she was making a motion.
12	Dr. Palmer replied yes. Mr. Parcells agreed with Dr. Palmer and seconded
13	the motion. All members agreed and voted aye.
14	Mr. Derdeyn said that Ms. Trent should be given some direction
15	about how to implement the changes.
16	Dr. Palmer said that footnotes seem reasonable to her.
17	Mr. Armstrong asked if that meant Ms. Trent has to go back and add
18	footnotes to the minutes from last time. Dr. Palmer asked if this would be
19	difficult. Mr. Tolbert stated that they were looking at the minutes from last
20	meeting now. Mr. Derdeyn said that looking at the format for the minutes, it
21	may or may not be easy. He asked Ms. Trent if she was able to add footnotes
22	to the minutes. Ms. Trent responded yes.
23	Mr. Parcells asked if the minutes from this particular meeting would
24	say, "see footnote from prior minutes."
25	Mr. O'Connell said that he envisioned that they would change the set
26	of minutes being approved, then put the context or statement or whatever.
27	Mr. Parcells asked how they would look that up.
28	Mr. O'Connell said that it would be with this set of minutes they were
29	approving.
30	Dr. Palmer asked if it would be at the bottom.

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Mr. O'Connell said that he would suggest that, for example, the ally meter that they wanted to put the context of what an ally meter was, that it be underneath in brackets. He said that they had done that in the past to create context, so that in history it would be there.

- Mr. Derdeyn said that the motion today would be to approve the minutes as amended with the footnotes discussed by the Board.
- Dr. Palmer said that they were just talking about those situations where they needed clarity, not the "for to" that she had pointed out or anything like that.
- Mr. O'Connell said that any spelling changes or incorrect speaker names would be corrected so that the minutes were clear for history. He said that this puts some of the onus on the staff, before giving them to the Board, to spend a little more time making sure the context was there. He said that they had kind of spoiled them because it had always been there. He said that that was the tradeoff, but they could keep working at it. He said that it was learning for them, and Ms. Trent said this several times, it was learning for them just to get used to working with the ACSA and the terms and all that. He said that it would get better as time went on.
- Mr. Armstrong said that he did not want to complicate this too much, but when they approve the minutes, should they be approving last month's minutes as footnoted, or should they be approving this month's minutes as they were assuming they would be footnoted.
- Mr. Derdeyn said that they should be approving the minutes that were before the Board as amended, pursuant to this discussion.
- Mr. O'Connell explained that it would show up in next month's minutes, this conversation.
- Mr. Derdeyn said that the minutes that would be on record are the ones that they are approving as amended by this discussion.
- Dr. Palmer moved to approve the minutes as amended pursuant to this discussion, seconded by Mr. Parcells. All members voted aye.

3. Matters from the Public

There were no matters from the public.

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4. Response to Public Comment

There was no response to public comment.

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5. Consent Agenda

a. Monthly Financial Reports

b. Monthly Capital Improvement Program (CIP) Report – Mr. Parcells said that on page 65, item 10, and item 12, the exclusion meter replacement, they had a long discussion last time about monitoring and capturing water use. He said that the remark under exclusion meters was that there are 296 private irrigation exclusion meters. [Editor's Note: 296 remaining meters to change out by ACSA, from private metering.]

Mr. O'Connell said that they had been rethinking as a staff that the present way they were doing exclusion meters was they were going onto someone's property and physically digging up the old and replacing with a new, and it tears people's yards and landscaping to get to where they could set in a new meter. He said that they had one spot that they were going to pilot where they were not going to be replacing lines like that but were going to work with an irrigation contractor to literally replace the meter. He said that it might take a bigger spot to be able to put a new setter in, and all the rest of the lines would be existing ones that would limit the amount of disturbance to the property. He said that their crews had been doing that work and it was very time-consuming and very difficult to get it back to really good condition. He said that they had a simpler approach that was probably longer-term and would be cheaper with the same result of having a new meter owned by ACSA that they could read electronically. He said there were internal administrative things they were trying to get into place, but they were piloting that on this one property fairly soon to see how that worked out with an irrigation

contractor, and if that went smoothly, they were going to switch from their crews doing the work to giving the new meter to an irrigation contractor. He said that they would be working with them through the homeowner to make the replacement. He said it would be simpler and they would be able to get the 296 done.

Dr. Palmer asked when the process of replacing the exclusion meters began.

Mr. O'Connell said that it was a couple of years ago.

Mr. Lynn said that they revised the Rules and Regulations in 2006. He said that probably around 2019, they developed what they thought was going to be a five-year program to get the 495, and they were about four or five years in and made about half, 200 complete. He said that they were moving at a much slower pace. He said that it was disruptive to the property owner, and they felt like they had with AMI the other tools they could try to track the irrigation consumption, then control that meter in the event of a drought.

Dr. Palmer asked if they could track the exclusion meters with that dynamic.

Mr. Lynn said that if they were given an AMI-equipped meter. He said that right now, those meters are privately owned, and they manually read those. He said they were offering to the customers to give them an AMI meter, replace their existing private meter, and then that allowed them to monitor that reading through their AMI system. He said that we would have readings on the domestic meter and their exclusion meter.

Mr. O'Connell said that if they got into a drought scenario, they would be able to electronically read them and know what was going on and manage it that way. He said that the other big thing for them was they devoted two crews away from maintenance and regular activities that they needed to be doing to do this project, so that was another cost they have had. He said they just saw the ability to do it without that and get their maintenance crews back to what they should be doing with other

work. He said that if the pilot worked out, they probably would come back

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2 with some kind of report to tell them how it was going to work. 3 Mr. Lynn said that they would need to amend the rules and 4 regulations if they felt the pilot program was successful. 5 Mr. Parcells said that he was confused in his discussion with that item 6 number. He said that he did have a concern with item 12, exclusion 7 meter, but they had addressed that concern, and going that route with 8 the irrigation sounded like a really good idea. He said that regarding 9 number 10, the water main replacement, they identified this project to 10 be put on hold, and he wondered if due to the corrosion failures of those 11 saddle connections, does putting it on hold compromise some of that 12 corrosion issue. 13 Mr. Lynn said that the construction schedule was still anticipated in 14 FY 2027 and FY 2028 at this point. He said that they were losing one of 15 their staff engineers who was moving over to the Director of Operations, 16 so they would be down a person. He said they wanted to be able to get 17 the new staff up to speed, then they would start cranking up more CIP 18 projects or getting this one back on track. 19 Mr. Parcells asked if the corrosion issue was kind of a one-off, so if 20 it occurred and caused a leak, they would have to address it then. 21 Mr. Lynn said that if it occurred, they had to address it and make the 22 repair and have services restored. 23 Mr. Parcells asked how often that happened. 24 Mr. Lynn said that they did not have any in there recently, but they 25 did have one in the Ivy Oaks subdivision over the weekend where there 26 was a corroded pipe saddle that failed. He said that their crews had to 27 respond Saturday to make that repair, and service was disrupted to 28 about 10 customers during the repair. 29 Mr. Parcells said that they were obviously balancing the risk against 30 the ability to actually expend the resources.

1	Mr. Lynn said that they had one position that was to be filled in
2	October and were still trying to fill the second position.
3	Mr. O'Connell said that there was also the issue of using the
4	experience of maintenance and working on some of the lines around
5	that neighborhood, but the ultimate way was to put in new lines and new
6	saddles.
7	Mr. Parcells said that it looked like they had made some progress on
8	the Lewis Hill Homeowners Association, and they had agreed with a
9	preference for the alternative group. He asked if they were happy with
10	that.
11	Mr. Lynn said that they were comfortable and wanted to make sure
12	they were comfortable. He said that there were some trees that needed
13	to be removed within the proposed easement, so they would work with
14	them on where new trees could be planted and how the easement would
15	be valued.
16	Ms. Swanson said that on page 64, number 8, the Townwood
17	Water Main Replacement, she was not sure if it was in the Rio District
18	but it was in her neck of the woods, and she was curious how well-
19	attended their first public meeting had been.
20	Mr. Lynn said that it was not a public meeting, it was just with the
21	HOA representative because they wanted to introduce the project to the
22	HOA representative and get them comfortable with the project. He said
23	that they were working on the comments on the 50% plan and then they
24	would look to see if they could have a public meeting for the community.
25	Ms. Swanson asked if it was well-attended.
26	Mr. Lynn said that it was just the one representative.
27	Ms. Swanson asked if they were thinking the walkthrough would be in
28	September or if they had a timeline.
29	Mr. Lynn said that they had a walkthrough with their construction
30	inspector. He said the focus was primarily on fire hydrant locations, and
31	then they have a section in the back where it is pretty congested, so they

1	may be looking at a replace in-place. He said they had to figure out how
2	to maintain water service to a block of townhomes while they replaced
3	the existing main.
4	Ms. Swanson asked if this was in the townhome community and not
5	along the road, or would it also involve replacement in the road.
6	Mr. Lynn said that they would have to make a connection on
7	Hydraulic Road in the intersection and then everything else will be in the
8	neighborhood streets.
9	Ms. Swanson asked if it would not go down to the former Einstein
10	property.
11	Mr. Lynn said that he did not believe so.
12	c. Rivanna Water and Sewer Authority (RWSA) Monthly Update – Mr.
13	Parcells said that on page 77, there was an operational presentation,
14	and they offered to provide a copy, and he would like to receive a copy
15	of that presentation.
16	Mr. O'Connell asked if anyone else would like to receive the
17	presentation about the urban water supply and demand review and
18	wastewater facilities review.
19	Dr. Palmer said yes.
20	Mr. Roberts said on page 65 was the payroll, and the payroll to
21	Albemarle County was \$70,000. He said that he would like to know why
22	they were paying Albemarle County.
23	Mr. O'Connell said that it was the part of the County's healthcare
24	program, so every payroll they paid them for that.
25	d. ACSA Board Policy Future Issues Agenda 2023
26	e. Advanced Metering Infrastructure (AMI) Project Update
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28	6. <u>Operational Presentation – JetScan 2.0 Camera</u>
29	Mr. Roland Bega, Maintenance Operations Supervisor, said that this
30	was a new tool they recently bought after July, and it went into the sewer
31	lines, which was operational with the flush trucks and displayed on the

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screen was a picture of what it looked like. He said that it was packed in a toolbox and was kept indoors at all times, because if any water froze in it could cause damage. He said that they went with this particular model because it was a universal fit for both of their flush trucks. He said that they looked at some that would only work on Unit 31, which was a ½-inch cable, and with this one it had an adapter so they were able to utilize it on both trucks so that if one truck went down they still had an operational vehicle. He said the screenshots on the slide showed that how it would hook up when running them down on either truck, and on the righthand side was the test kit that they would perform with air to make sure that none of their seals were leaking before they stuck it into the sewer line and water getting into one of the openings or anything that could cause damage. He said that it was inspected daily when they used it. He said that with running the camera down, they were able to see what was there, whether it be grease, roots, gravel, or something else causing a blockage or during their routine maintenance. He said that it was able to tell them what nozzle selection they needed to use based on the type of blockage. He indicated a screenshot on the slide of what they recently found, and was how it operated. He said that this was during their routine maintenance, and they ran the camera first. He noted that it could be seen in the top lefthand corner of the image where someone had bored through their line. He said that they were able to find that with the camera, but had they just been doing their routine flushing, they would never have known it was there. He said that now they were able to catch anything like this that may have happened.

Dr. Palmer said that nothing was coming in there. She asked who would bore through the line.

Mr. Lynn said that this was the one that was mentioned in the FY2024 rehab, this was work order 2, and a Geotech boring company did that. He said that the next pictures Mr. Bega would show were work order 3 that they already had repaired.

1 Dr. Palmer asked if this was just an accident or did the company not let 2 them know. 3 Mr. Bega said that they did not know that they hit it. He said that they 4 found it during their routine inspections, and if they had just done normal 5 routine flushing, they would have just flushed it, and they would have 6 eventually caught it because they did run their CCTV cameras through all of 7 the lines, but it depended on what timeframe they would have gotten to that 8 point. 9 Dr. Palmer said that the Geotech company ought to be using this utility, 10 but how would they not know. 11 Mr. Parcells said that they were PVC pipes, so it would not resonate. 12 Mr. Bega said that with PVC, they tried to align the manholes and make 13 a straight line, so he did not know how it was hit, but they were able to find 14 it with their JetScan camera. Mr. Armstrong asked if they had to pay for the repair. 15 16 Mr. Bega said yes, they would be paying for damages. 17 Dr. Palmer asked how they knew that it happened. 18 Mr. Bega said that they relied on the Engineering Department which knew 19 they were doing the Geotech boring in that area in certain locations. He said 20 that once they found something like this, they communicated with the 21 Engineering Department, or they would call in a Miss Utility ticket and see 22 what utilities were running through there. 23 Dr. Palmer asked how often they were checking a line like this. 24 Mr. Bega said that the flush truck goes out every day, unless they had 25 something come up. He said that every time a flush truck came out, they 26 were running pre-inspections with these, and they had the two CCTV 27 cameras that they went around with. He said that one was mostly doing CIP, 28 but the other CCTV camera was doing its normal routine inspection of all the 29 sewer lines in general.

Dr. Palmer asked how often they would flush this.

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Mr. Bega said that it depended. He said that they tried to get to all of the lines every year or year and a half, but there were certain lines they knew had grease in them, so they try to put them on a regular routine where they keep them flushed out pretty good. He said that they would make notes that a line had been pretty clear the past year, but another one had a lot of grease in it, so they would put the troubled ones in the front and then do regular maintenance work.

- Dr. Palmer asked what the diameter of this line.
- Mr. Bega said that that one was probably an 8-inch line.
- Ms. Swanson asked if they had a company on the hook for repairing this and if they had a set of material standards or something.
- Mr. Bega said yes, they would have to use whatever material they had in their specs before they would be replaced.
 - Dr. Palmer asked if they would just cut the whole thing out.

Mr. Bega said yes, they would have to cut so far on each side and then make the repair. He said the next line displayed on the slide was what the JetScan was going to help them with. He said that in the past, before they had something like this and they had a sewer blockage, they would either run the flush truck or if they cannot get it with a flush truck, they would run their rodding machine down through it, which would cut any roots or anything like that. He said that in this specific case on Commonwealth Drive, they had a sewer overflow and they were having a hard time getting through it, but when they ran the camera and everything down there, as shown on the bottom half of the picture, the power cable bored through their line. He said that was restricting how much flow was going through that pipe, so eventually it backed up, and that was when they became aware that there was an issue on this one. He said they had to flush it every week until the company came and got it repaired.

- Dr. Palmer asked if this was Dominion's responsibility.
- Mr. Bega said yes. He showed the next image on the slide showed where they had to break it out, and the next showed where they had to cut the

section of the pipe out. He said that the corrugated pipe was where Dominion

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2	rerouted their powerline. He indicated the next image which showed the final
3	repair on the line itself.
4	Mr. Parcells asked if this was a case where Dominion drilled a hole and
5	pulled their conduit through.
6	Mr. Bega said yes, that was where they did their directional boring. He
7	said that the ACSA line could have been marked, but they took a gamble if
8	they did not test dig right there. He said that this line was fairly deep, so they
9	may have thought it was deeper than what it was and just bored through it.
10	Mr. O'Connell noted that typically, an out-of-town contractor was there
11	working quickly, and the lines could go all over the place or could hit a rock,
12	so they were sometimes not very careful.
13	Dr. Palmer asked how deep were their sewer lines supposed to be dug.
14	Mr. Bega said that it would vary on the mains and everything, so he would
15	say they had some that were 3 or 4 feet deep to 20 to 25 feet deep.
16	Dr. Palmer asked if they had to be at least 3 feet deep.
17	Mr. Bega said that he did not know what the state required for how deep
18	they should be.
19	Mr. Lynn said the minimum was typically 3 feet. He said that they
20	probably had a couple of instances where they had an aerial crossing of a
21	creek where they could not get under the creek, but 3 feet was the typical
22	minimum.
23	Dr. Palmer said that their waterlines had to be that deep because they
24	would freeze.
25	Mr. Bega said that with the JetScan, as he mentioned before, they were
26	able to run this with their flush truck. He said that in the past, what they had
27	to do if they knew they had a problem, they would have to go in there and
28	flush and not really see what they were doing, then we would call in one of
29	their CCTV trucks vans to come out and run their camera through there and
30	let them know if they needed to flush more or if they were good. He said that
31	in one case, they had a lot of gravel in the line and had to call them back like

two or three times. He said that with this JetScan, they were able to see as they were flushing what they were doing and run it through there. He said that at the end of the day it was going to save time and money for them because they were not having to pull that CCTV van and they were going to be able to stay on their CIP project or their regular maintenance can just continue to flush and they know what they had and they can walk out of there once they know that line is clean.

Mr. Parcells asked what kind of maintenance was expected to have to maintain this.

Mr. Bega said that as far as the camera, as he showed on that one slide, it had a little test kit, and as long as the O-rings stayed lubricated and everything, they did not anticipate any major problems, however, they would eventually have that surprise one day.

Mr. Parcells asked if the lens would get scratched up and need replaced.

Mr. Bega said at some point, but they did not know what kind of time frame they would be looking at for that. He said that hopefully they would not be running into gravel all that much, and the water should not scratch the lens. He said that hopefully they would not have much maintenance expense on that.

- Ms. Swanson asked if it worked with Bluetooth.
- Mr. Bega confirmed that it did have Bluetooth.
- Ms. Swanson asked how far it could go before it lost the signal.

Mr. Bega said that it only went probably about 1 foot into the line before they lost it, so they linked it to their iPad, and once it took off they lost the connection and could not see what it was doing, but once they brought it back, the two synchronized back together and it downloaded to the iPad so they would look at it.

- Ms. Swanson said that it was not live.
- Mr. Bega confirmed that it was not live, but once it came back, they connected back together.

Mike Lynn said that one thing he would like to add from a safety standpoint was that Mr. Bega showed in the picture that electrical line that went through there. He said that they had the gas company, telephone, fiberoptic, and electrical utilities that were doing directional boring. He said that in the past, if they tried to cut a line that they could not inspect first, there was a possibility of somebody getting electrocuted or cutting open a gas line, so this was by far the greatest thing that they had to keep their employees safe, plus to minimize disruptions to the community.

- Mr. Parcells asked if they had to request Dominion to turn off power then while they dug around that electrical cable.
- Mr. Bega said that Dominion came out and cut the line out and did all of the work themselves, so the ACSA did not do anything with that.
 - Mr. Parcells said that they took pictures because they were monitoring.
 - Dr. Palmer said that they could have pulled it out at that point.
- Mr. Bega said that they did not know what was there, so they called a Miss Utility ticket in so everyone was away from it, but Dominion happened to be 3 inches away from that, so at that point they notified a representative from Dominion who came out and looked at that and they showed them their pictures of the powerline. He said that it was a great tool for them to go out and know what they were doing and how they were cleaning the lines out as well as the safety point.
- Mr. Parcells said that with all the renovations taking place and all this digging, it was getting more and more complicated.

Mr. Bega said that yes, everything was pretty much going in the ground now and being bored, and unfortunately, it was going close to the water and sewer line. He said that when they bored into the water lines, they would find it because obviously they would have a water leak, and for the sewer line, if they go through it until something stopped up or they were doing regular maintenance was when they would find the issue.

Mr. Parcells said that when they were digging the trenches for the 36inch water lines, it must be a challenge to figure out how to lay that line and not disturb electrical, gas, or other utilities.

Ms. Swanson said that they did a really good job at it. She said that in her neighborhood, which was an older neighborhood, at the time the sewer and water line had been installed they were all over the place, so there was no keeping the sewers not over top of the water line standard.

Mr. Parcells said that he was thinking of the Central Water Line project in the City.

Mr. O'Connell said that they already had a conflict in the design stage because there were so many utilities in the locations, so they were having to find an alternate route. He said that they were even seeing in new developments with more density going in, there was not much land left, and trying to find places to put all the utilities was getting more and more difficult. He said that for a brand new development and a clear piece of land to some extent, but there was so much building going on that there was not much room for utilities.

Mr. Parcells said that going back to the earlier point about early communication, if a developer was going to do something they needed to talk to the ACSA about where the infrastructure was going to be able to go.

Mr. O'Connell said that they got plan reviews. He said that one of the current conflicts was the County's desire to have more trees, and more trees were in the green space where the utilities can go, and trying to weave that in and where manholes occurred. He said that every project had some of those issues, even with the new things.

Mr. Parcells said that it may be a good thing to point out in communications to customers the challenges they faced and tie that in with the renovations that they did in terms of being aware of the challenges they were facing to maintain the water or sewer supply. He said that it would be helpful for people to understand.

Ms. Swanson said that within the urban ring, with any of the internet service providers that had been putting in conduit. She asked if they had much interaction with them or had a way to communicate with them or if they somehow interfaced with some system that they knew they were working in an area.

Mr. Bega said that when Ting was coming through and boring, the only way they knew was when they called in the Miss Utility tickets, so the locator would go out and locate, then they would give them a heads up about where they would be boring in these areas and where they would be boring close to the water and sewer line, so they can be ready to dispatch if they do hit something.

Ms. Swanson said that one of the things she had come to understand that in a lot of the neighborhoods, there was a five-foot right-of-way that VDOT had, so they might think they had lawn and were cutting that grass, but anything below electrical powerlines VDOT had the right-of-way. She said that it was still considered private property, so if they decided to come through and put internet service underneath that, they could hit the gas line or water line, that was still on them and not on us.

Mr. Bega said that they had a little bit of that with Ting going through and they were hitting a lot of the customers' private service lines, and it was pretty much Ting's responsibility to make that repair for the customer.

Dr. Palmer said there were situations she remembered when the sewer line was actually underneath the building that was already built or too close to the building so that it could not be replaced but had to be rerouted. She said that Boar's Head was one of those situations. She said that it creates all kinds of problems. She said that the other thing she thought was really interesting was that she had this utility out to her house three or four times in the last couple years and they always mark where the utilities are, and it's been really interesting to her because the red line they put in was always different, sometimes 5 or 10 feet off. She said that the accuracy was an issue, and she did not know what the problems were there.

Mr. Bega said that they had some mismarked here and hit powerlines and stuff like that, such as telephone or cable that was mismarked. He said that there may have been an old line running through there and that was what they marked and they did not mark the new one.

7. <u>Imagine a Day Without Water – Resolution</u>

Ms. Emily Roach, Director of Human Resources and Administration, said that they were excited to partner with Rivanna Water & Sewer Authority and the City of Charlottesville for their 9th annual community event, Imagine a Day Without Water student art contest. She said that the contest was open to all students in the City of Charlottesville and County of Albemarle in grades K-12. She said that this year, they were asking students to convey an action they take to save water, contest fliers were being distributed with their monthly customer bills as well as throughout the school systems. She said that this was part of a national action campaign called Imagine a Day without Water that this year takes place October 19th, and the campaign is designed to bring communities and stakeholders together to highlight the importance of conservation of this precious resource. She said they were asking the Board to approve the resolution in front of them proclaiming October 19th as Imagine a Day Without Water to help recognize the value of safe and clean water in our community and nationally.

Mr. Parcells moved to adopt the Resolution proclaiming October 19th as Imagine a Day Without Water, seconded by Dr. Palmer. All members voted aye.

Mr. Parcells said that on the topic of water, out where he lived in Free Union, they were really dry. He said that he wondered what their status was overall. He said that there had been a voluntary conservation alert in the news, but he wanted to know how they were.

Mr. O'Connell said that supply-wise, they were right at 90%, and they were at a point without rain and there seemed to be some rain in the forecast. He said that the reservoir numbers may get less and less quickly. He said

that typically they were going to see some rains from some of the hurricanes around the Caribbean for some refilling. He said that Rivanna had made a shift. He said that part of the long-term water supply plan was to increase the amount of storage at Ragged Mountain and expand the Observatory Water Treatment Plant. He said that the workhorse has always been South Rivanna, and that was where they were seeing effects on the reservoir, so they moved some of the production to Observatory that pulled from Ragged Mountain to help balance the system better, not put as much strain on the Sugar Hollow and South Rivanna side. He said that was the immediate change. He said that if things keep going and they see dry weather, they may have to start more voluntary conservation kind of information out to the public. He said that it was getting colder and people were not out there watering like they have been, and the volume demand daily is starting to drop, so they should be in a good place.

Mr. Parcells asked if there was a threshold for the reservoirs at which they did implement conservation.

Mr. O'Connell said yes, there were some numbers and a formula that Rivanna used. He said that when they hit the 90%, that triggered the switch to Observatory. He said that the limitation of the Observatory is the size of the pipe and the Observatory treatment system. He said they only can push so much water, 3 or 4 million gallons per day. He said that part of the Central Water Line project will enlarge the pipe to where they could switch to where Observatory was doing 100% or 90% percent, so that was the longer term plan. He said that they also had the pipeline that would move water back and forth from the reservoirs and the treatment plants that was a piece of that as well, but that was six or seven years away.

Dr. Palmer said that just this morning, the numbers for Ragged Mountain was 88% full and South Fork was 85% full. She said that the outlying reservoirs were in better shape, and Rivanna put out a daily water status report that anyone can sign up for and track it. She said the outlying put them higher than that, but that was what the point was.

1	Mr. Parcells asked if Sugar Hollow was higher than that.
2	Dr. Palmer said that Sugar Hollow was 97% full.
3	Mr. Parcells said that the river was stagnant.
4	Mr. O'Connell said that they were not pulling water from it.
5	Dr. Palmer said that on June 29 or around that time was when they
6	stopped pulling from it.
7	Mr. O'Connell said that they would not pull it until they had some
8	major rains this fall. He said that they would start to see the Ragged
9	Mountain number drop, more so because they were using more of that
10	volume. He said that they still had a lot of storage, which was the whole point
11	of the long-term water supply plan, so that if they got in a period like now,
12	they would have enough storage to be able to supply our customers.
13	Ms. Swanson asked if the North Fork was back in operation.
14	Mr. O'Connell said yes. He said that there was a lot of rain in Greene
15	County that made its way into the river even though it did not rain here at all,
16	so they had a decent supply so far, but it could get to the point that it stayed
17	really dry that they had to shut that plant down and start using South
18	Rivanna.
19	Ms. Swanson asked if South Fork was able to serve all the North
20	Fork plant's customers.
21	Mr. O'Connell said yes. He said that when they had to shut down
22	North Fork, there was a network of piping that had been put into place that
23	in a sense was temporary, there was a new pump station being built that
24	would make it permanent, but that went smoothly, and he doesn't think
25	customers noticed anything when they made that shift.
26	Dr. Palmer said that they were closing the North Fork Water
27	Treatment Plant in 2026.
28	Mr. O'Connell confirmed that 2026 was the current plan.
29	Mr. Roberts said that all of this discussion was good reason why they
30	needed that pipeline and the 12 feet.

Mr. O'Connell said that their conversations, particularly with the City about the 12 feet, were trying to do that quicker. He said he sent them a couple pieces of information about the decision about the 12 feet, which is a city-owned property leased to Rivanna and changing the 2012 Water Supply Agreement. He said there was a lease provision that was being discussed and will be involved with the City Attorney or Rivanna's attorney on all of this. He said that the last one is a minimum flow requirement regimen for the Mormons River to make sure that other releases from Sugar Hollow continue, even if there was water that was in there. He said that essentially it was going to be during rainy, wet weather, excess water that was going on over the dam that Sugar Hollow would be grabbed and moved to Ragged Mountain, and when that was not occurring, there would not be any kind of transfer. So, it was a slow fill when the 12 feet was done, but it would make sure the commitment to in-stream flows would be there. He said that one was hopefully coming by the end of the year, so they needed to get through the attorneys' meeting and then get to City Council and then it would come back to our Board.

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8. Operations Presentation – Role of the Construction Inspector

Mr. Jeremy Lynn, Director of Engineering, said that he would start off by introducing their team of inspectors. He said they could see with the years of experience that they had a top notch group of individuals. He said that David Hensley had been here the longest, started in the Maintenance department in 1980, served for about nine years and then went to the County Zoning Department where he worked for five years, and then he came back here as a Construction Inspector in 1994. He said that Jeff Herr started in Maintenance in 1991, also served in the Finance department as a Meter Reader, then he transitioned to the Engineering department as Utility Location Technician and then became an inspector in 2008. He said that Charles DaCosta is our newest, but had still been with the Service Authority since 2001, so he joined our team in 2023 following the retirement of another

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inspector. He said that Jay Thomas had been here since 1997, and also served as a Hydrant and Valve Mechanic during his time in the Maintenance department. He said that Mark Clinedinst also started in 1997 and was their first construction crew leader and was responsible for the construction of the distribution system in the Red Hill well system, so he had a lot of experience. He said that in total, they had 145 years of experience with the Service Authority, and 80 of those are as construction inspectors, so this was a very talented group of individuals. He said that he wanted to talk a little bit about what they do. He said there are responsibilities for the construction inspector prior to any activities beginning out in the field. He said a project engineer will approve the plans, and they will assign a construction inspector. He said they were typically assigned based on availability and geographic location. He said the approved plans are provided to the inspector for review, to make sure they are familiar with what the work entails, and to make sure they did not have any questions. He said that there are sometimes one-on-one conversations between the project engineer and the inspector ahead of time just to make sure everybody understands fully what was expected. He said that they then have a pre-construction conference with the contractor, and they are usually held in person, but they had transitioned some to virtual meetings with COVID-19. He said it was just easier to get people from out of town on the call. He said that during that call, they talk about the ACSA's utility inspection policy, and when the construction activities are expected to start. He said a couple of highlights from the utility inspection policy were that they do require the responsible field superintendent to be at the preconstruction meeting because they want to know who was going to be in the field overseeing the work. He said they did not want someone from the office being the contractor's representative. He said they do require that the contractor not backfill any valves, hydrants, fittings, or manholes prior to an ACSA inspector putting their eyes on that and approving the installation. He said that they did not allow changes without ACSA approval so if a contractor wants to make a change to the plan, they have to get ACSA approval before

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they can proceed with that work. He said they also talk about notifications for when construction activities are going to start and also when testing this plan.

Ms. Swanson asked if during that process they were able to quickly accommodate if a change needed to be made.

Mr. Lynn said that with the experience that they have in the field, a lot of those decisions are handled between the contractor and the inspector. He said the inspector has some leeway in making decisions in the field based on their experience and that they were good with this change. He would let the project engineer know, but they can proceed with this work. He said if it was a complicated decision where feedback or input is needed from the project engineer, they were on the phone, they have FaceTime capabilities, and they are able to make those decisions pretty quickly to avoid a shutdown of the job. He said once they conduct the preconstruction meeting and the contractor is ready to get started, the construction inspector is going to report to the job site, to become familiar with the layout of the project. He said they want to make sure that all of the materials that they were proposing to use meet the ACSA's approved products list because they did not want inferior products to put in the ground that are going to be our responsibility down the road. He said the inspector is also going to make sure the contractor has the right equipment, both for installation and testing purposes. He said they talked a fair amount about Miss Utility earlier in the meeting, but the inspector is responsible for Miss Utility markings for their private development projects and also for their capital improvement projects. He said they were the ones that are coordinating directly with the contractor to know what needs to be marked when and they were taking care of that. He said that during construction, there are certain things that the inspector is going to be focused on ensuring that they were properly installed. He said they were going to make sure hydrants are set plumb. He said that if they thought about their utility system, hydrants are the most visible so we want to make sure those look good and were going to operate properly in the event of emergency. He

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said they were going to make sure adequate thrust blocks were installed: those are at fittings and valves, so that when the pipe is pressurized and water was flowing, they were going to have proper restraint on the water main. He said they were going to make sure the meter boxes are put in the right spot because they did not want meter boxes up near the house, they want them down near the road where their crews can access them easily. He said that on the sewer side, they want to make sure manhole elevations are proper, they did not want them too high or too low. He said that alignment and grade of sewer lines between manholes is a straight line and at a set grade. He said they do have minimum grades to ensure the wastewater continues to flow without any sort of build-up, so the inspectors are making sure those grades and alignment are set properly. He said that ensuring adequate bedding, they want to make sure the pipes are protected underneath so that it was not going to settle and it was not laid in contact with rock that was going to present a challenge in the future. He said those are specific to both water and sewer. He said they were going to make sure the contractors using the appropriate trenching, so if they see something unsafe they were going to say something, and if that means they had to notify OSHA, they would. He said they wanted to make sure that everyone went home from a job site each and every day. He said they want to make sure the contractor stays within the easements. He said that easements are pretty tight in new development, and they have buildings that are right on the edge of easements so utilities cannot meander and get out of those easements. He said the inspector was going to take field notes, and that can be progress, any challenges encountered, any decisions that were made that differ from what had been approved on the plans, all of those notes are going to be documented by the construction inspector. He said that to take this a step further, on CIP projects those notes can be extremely important when they got to disputes or mediation, so they really challenge and really stress the importance of field notes by the inspector when they were on CIP projects. He said that Mike Derdeyn can probably attest to that. He indicated

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on the screen four pictures of water main installation. He said that the first picture on the left is a T-intersection with three valves and it could be seen the concrete thrust blocks there to ensure that pipes do not move once pressurized. He said that the second picture is a nighttime installation along Georgetown Road, and the third is their maintenance crews making a tap. He said they called it a wet tap, so that existing pipe, where the gentleman in the yellow hat is standing, that pipe is in service, and it had water flowing through it. They were going to make a connection to that existing main to extend the water main in the direction of the worker in the white hat. He said that allowed them to make connections to existing pipes without disrupting water service to our customers. He said that the fourth picture, the one on the right, is an installation of water main out at Boar's Head. He said that he wanted to share some pictures on the sewer side. He said that sewer was generally deeper. He said they had to make sure that the properties can be served by gravity flow. He indicated the left picture on the slide, where they started to stack sections of a concrete manhole, and they were applying some mastic tape to seal that joint between the two sections of concrete manhole. He said that the second picture, which Mr. Parcells had probably seen, was Oak Forest, where they were boring behind the Costco property. He said that the third picture is a trench box, where the contractor is installing a manhole on a Northfields project. He said the fourth picture is an aerial sewer crossing. He said that when they could not get gravity sewer under a body of water, sometimes they had to go above it, and they have about a dozen of those in their system.

Dr. Palmer said that they must constantly have to go back and put the riprap back in.

Mr. Lynn said that they had to keep an eye on that. He said that maintenance does a really good job before and after any heavy storms. He said they anticipate that if they were getting calls for a couple inches of water or a storm, they were checking those before and after to make sure there's

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nothing hung up that was going to create a problem and then make sure that things are moving through there after a storm.

Dr. Palmer asked if they preferred that they go under.

Mr. Lynn said they would prefer to go under as well, but if the alternative is a pump station, then they were going to use an aerial crossing. He said that regarding decisions in the field, with the experience of their inspectors, they have the latitude to make some decisions without running every single thing by the project manager. He said they know their specs and probably more in tune with what the specs say than anyone else in the organization, so they were contending on a regular basis with conflicts with other utilities, with grades, with rock. He said they were responsible for incorporating those changes into the plans for as-built development. He said that as they could see on the right side of the slide, Mr. DaCosta is GPS locating a manhole. He said it was important that they were GPS-locating all valves, fittings, hydrants, manholes, and then that information is relayed to their IT department where their GIS is continuing to be developed. He said that the GIS was probably the most important tool that they have as an organization; every department is using their GIS, and that forms the basis of their CMMS program. He said that after everything was installed, there was a testing process. He said that they were testing water mains, disinfecting water mains, pressure testing, and then they were making sure samples are collected that go to an independent lab that indicates that the water is safe to drink following construction. He said that on the sewer side, they were testing manholes and mains with the focus of making sure it was tight, they were not introducing inflow and infiltration into the system, so they want to make sure that sanitary sewer system is only conveying sanitary sewer and not rainwater. He said that at the point where the project was finished, all the construction is in, all the testing is complete, and they were starting to allow customers to come online, the contractor and the inspector go through a final inspection process. He said the inspector develops a list of punch list items for the contractor to address, and that might be raising

certain things or correcting broken valve boxes, and then the inspector is also reviewing and approving the as-built drawings to make sure they have a paper trail of what was installed in the field. He said that this is where their CMMS program begins, so there is a valve inspection and a hydrant inspection performed on each of those assets and establishes the foundation in their CMMS, our City Works program. He said that the project is turned back over to the project engineer who works with the developer to complete the dedication process, which means ensuring easements are recorded and also a Letter of Dedication. He said that once all of those steps are complete, that begins the one-year warranty period, so the developer and the contractor are then required to ensure that everything is maintained and corrected through the end of that one-year warranty period. He said that at about the 10-month mark, they send the inspector and their maintenance folks back out to perform a follow-up inspection to make sure nothing has changed, and then they generate a one-year warranty punch list for the contractor to address.

Ms. Swanson asked if they had had any issues where they had to have the contractor come back in, and how frequently that happened.

Mr. Lynn said very regularly. He said that most of the time it was stuff that has been damaged during winter of snowplows, maybe there are some valve boxes in the roadway that were just a little bit high, and they had been hit and damaged and they have to repair those. He said it was pretty regular that they have one year warranty punch list items. He said that most of what he had talked about was specific to developer projects. He said that there are slight differences between a developer project and a CIP project. He said the big difference is they were funding the CIP project, so they were paying the contractor to do the work and were overseeing every aspect of what they were doing on a daily basis. He said that CIP projects have a full-time inspector. He said they may have some private developer jobs in the area, but they are the in-field point of contact for that project. He said that after the introduction letter to the residents, the inspector is the day-to-day point of

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contact for customers. So if they have an issue, they've been given the inspector's phone number and contact information and they're the ones that speak to them on a regular basis. Inspectors responsible for maintaining an inventory of materials. They want to make sure that what they have still meets the specifications and sometimes a contractor will want to be paid for stored materials, so they had to balance what was stored and what had been incorporated into the work. He said that each month, the contractor and the inspector meet to go over the pay request. He said that was done and agreed to before it even makes it to the project engineer's desk. He said they were making sure they know how much pipe has been installed, how many services, how many valves, how much stone, etcetera. He said that as stated earlier, the inspector is responsible for Miss Utility locating. He said that to give Jefferson Village as an example, Jefferson Village had asbestos cement water mains, which is not traceable, so it was very difficult for the construction inspector to perform Miss Utility responsibilities neighborhoods such as Jefferson Village. He said that they did not have any breaks, any hits, or unexpected water disruptions in Jefferson Village. He said there was more hands-on involvement from the inspector's standpoint when they were dealing with CIP projects. He said they were the ones fielding the calls after hours on the weekends when there was an issue.

Mr. Parcells said that they had 26 projects, all of which are not necessarily in the field, but with five inspectors to have a full-time assigned CIP project, in addition to the about 20 developer projects going on. He asked if five inspectors are enough.

Mr. Lynn said that at this point, they felt good. He said that if they have to ramp up CIP projects, right now they have Crozet Phase 4 that's getting ready to go to construction, and they want to get Broadway Street and Barracks West to construction in the next six months. He said that it will be difficult to complete those three projects at the same time. He said they had gotten to where they typically had two active pipe in the ground CIP projects. He said that as mentioned, several of those would not require a

construction inspector, so they were pulling in resources. He said that like the four story backflow, they used their environmental group to handle that project. He said that for a lot of the pump station and comminutor work, they were pulling in the facilities group, for exclusion meters, that was handled strictly by their Maintenance department. He said that the 26 starts to dwindle down, and then they have projects spread out over the next four or five years, but it was difficult. He said that at some point, if they ramp up their CIP, they were probably going to have to look at another inspector.

Mr. Parcells asked at what point they became involved, because they had design stages and then they got to the construction stage.

Mr. Lynn said that for the question about Townwood, their project engineer walked the job with a construction inspector. He said that they are looking at things on paper while they have actually had to install these things in the field. He said that using their experience, they were going to see challenges that we might be missing, and that was why they partner up an inspector and a project engineer during the 50% design to make sure they were not overlooking something from their perspective.

Mr. Parcells said that David Hensley seemed close to retirement. He asked if they had someone lined up for succession planning.

Mr. Lynn said they had those conversations every six months on what their succession plan looks like, and Mr. Hensley was still a few years away from retirement. He said that it was something they must start figuring out, and it was the same with all senior employees. He said that if they have a time frame where they were going to give us notice that it was going to be a year or two, they are probably going to have to have a sixth to get a little bit larger to have some overlap, and then they may have to contract back to five.

Dr. Palmer said that she did not know if they had people working their way up to this. She said that she knew that when she left the Board of Supervisors, they did not have enough inspectors and it was challenging to

1 hire new inspectors, and it did create some issues with not being able to get 2 people out there in time for contractors to continue out there. 3 Mr. Lynn said that when they hired Mr. DaCosta, they had several 4 other very qualified internal candidates, so that was promising for them, but 5 those candidates would be coming from other departments within the 6 organization which may stress another department. 7 Mr. Parcells said that Mr. Lynn's presentation about their 8 responsibilities and the duties was impressive, and it certainly speaks to the 9 intent they had to make sure the link was good. 10 Mr. Lynn said that it was important to them because they were going 11 to own these lines, this infrastructure, and they want to make sure it was top 12 notch when it went in the ground. He said that it was not done cheaply, and 13 it was going to be a lasting product to avoid a CIP project in the future, or 14 further delay a CIP project. 15 Mr. Parcells asked if he said that on the one-year review it was that 16 assigned inspector that got that review. 17 Mr. Lynn said that was correct. He said that it was a partnership with 18 their Maintenance department, so there was a coordinated effort between 19 maintenance and engineering to do those one-year warranties. He said that 20 the CCTV group is handling all of the sewer inspection, televising every line, 21 inspecting every manhole before that one-year warranty so we can have 22 anything fixed that needs to be fixed on the developer's dime and not theirs. 23 Mr. Parcells asked if there were frequently items that needed to be 24 fixed. 25 Mr. Lynn replied yes. He said that they had to think that when they 26 accept the utilities, maybe not every home is built, so builders make changes 27 to the grade, homeowners may make changes, and then damage to things 28 in the roadway were the typical things. 29 Ms. Swanson said that on the materials side of things, like at the 30 project development stage, they were looking at whether they do soil testing,

and she assumes they have to do soil testing because they had a

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1	requirement that they do, so for areas where they know they have acidic soil,
2	and she thought they had a policy to have them be wrapped.
3	Mr. Lynn said that was correct.
4	Ms. Swanson said that they wanted to get a 60-year life at least out
5	of the pipe.
6	Mr. Lynn said that there was a layer in their GIS tool that displayed
7	corrosiveness, so if it fell into the medium or high, they required Geotech soil
8	samples performed by the developer at their expense prior to construction,
9	and that was when they made that decision if the soil was corrosive that they
10	would wrap the pipe. He noted that all pipe is now zinc-coated, which is an
11	initial form of corrosion protection. He said that their Crozet Phase 4 project
12	is poly-wrapped because there are corrosive soils in Crozet. He said that he
13	tried to add a bit of lightness to the end of the presentation, and he asked
14	Ms. Trent if she thought it was corny, but it seemed to be appropriate that
15	everything looks good on paper, the lines were where they were supposed
16	to be, but then when they were out in the field, they certainly encounter things
17	they did not anticipate. He indicated the examples shown on the slide. He
18	quoted, "life is like a box of chocolates, you never know what you're going to
19	get."
20	Dr. Palmer asked what happened with the house pictured on the
21	screen.
22	Mr. Lynn explained that the contractor was taking down trees for a
23	sewer project and they knocked the fence over.
24	Mr. Parcells asked what the second picture was showing.
25	Mr. Lynn answered that the top pipe that was running at an angle at
26	the top was the existing water main, the green pipe was the existing sanitary
27	sewer main, and they were threading the needle with that black pipe, which
28	was the new water main.
29	Mr. Parcells asked if that meant the old water main on top would

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remain.

Mr. Lynn said that it would be taken out of service but would remain intact throughout construction. He said that they could not just get it out of the way because it is still in service providing water service to their customers. He said that during a CIP project, they had all the other utilities, but they had an existing water main that they had to keep in service and active. He said they had to put the new main in, had to get the new main in service, and then they start the process of switching customers from the old main to the new main.

Ms. Swanson asked if the picture on the left was Dominion by chance.

Mr. Lynn said that the picture on the left was a large stormwater pipe probably 12 to 15 inches in diameter. He said that those were usually unmarked and they did not know about them, and they were usually in pretty poor shape. He said that if they see something like this on a project where VDOT was involved and they were in a VDOT roadway, they will let them know and give them a chance to make that repair or replacement before they ended up repaving the roads. He said that they had a couple of those in the Hessian Hills where they communicated with VDOT and they replaced them before the roads were repaved.

Ms. Swanson said that when they did the water line replacement in the Berkeley neighborhood, after the fact that VDOT came in and replaced.

Mr. Lynn said that they could only tell them that their pipes were in that condition and they could not force them to do anything.

Mr. O'Connell asked if Mr. Lynn could discuss paving and the final step for projects.

Mr. Lynn asked if Mr. O'Connell was referring to CIP projects. He said that he would give Mr. O'Connell a lot of credit, they used to do the bare minimum when it came to repaving neighborhoods for CIP projects. He said they would do just enough to get by, would try to pave a lane, would try to do a slurry mix that would just cover up what they did. He said that they made the change a number of years ago that the lasting impression that they want

to make for their communities that they were disrupting for three months, six months, nine months a year is a really good finished product, and they had been really successful. He said that a couple of projects they had shared the pavement costs with VDOT, Barracks Road was an example. He said that on Berkeley and Westmoreland, they shared repaying costs with the City gas and they actually put in City gas in those communities at the same time that they were doing their water main replacement project, so they shared the cost. He said they tried to make a really good lasting impression and fully repave these roads when they were finished. He said that was what they were going to likely remember them by. He said the water disruption was inconvenient, the construction noise, the dust, but when they see the finished product, they hope that they were happy. He said they get a lot of good positive feedback when we take that approach, so it was kind of a feel-good story, but it does drive up the cost of these projects. He said that pavement is a very expensive part of CIP projects, but they feel that it was important to leave a good lasting product.

Ms. Swanson asked if a neighborhood was on VDOT's get-aroundto list for repaying, was there not a way they could have VDOT share in the cost since it was already built into their cycle.

Mr. Lynn said there were coordination meetings they had annually with VDOT staff to identify and understand what their paving schedule was going to be, and Barracks Road was a prime example. He said that VDOT had actually scheduled to repave Barracks Road a year or two in advance, but ACSA asked them to wait because they did not want to tear up a brandnew road because it would make them all look pretty stupid. He said that they had them hold off on that project for a year or two while they did their work, they paved their lane, and then VDOT paved the other side so that at the end it was a good finished product that they shared in the cost.

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9. Strategic Plan 2023-2027 Update

1 Mr. O'Connell said that the Board adopted their strategic plan this 2 past spring. He said that one change they are recommending in this update 3 is that they extend the plan from a three-year plan to five-year plan. He said 4 that essentially, as they got into the current projects they have going on, such 5 as something like advanced metering that had gone slower than they hoped, 6 keeping that going and then being able to do some of the newer projects that 7 they were proposing in the strategic plan, they think it makes more sense to 8 look at on a five year basis in terms of how they schedule things, how they 9 coordinate things, how things fall together. He said that at the end, he would 10 like to come back and ask the Board to consider doing that because they 11 think it makes a lot more sense. He said that most of their strategic plan is 12 focusing on newer things. He said that some of these have been teed up by 13 projects in the past to either finish or be able to connect to something new 14 that they were proposing to do. He said they also looked at four major 15 themes around data optimization, business resilience, customer experience 16 and employee experience. He said that they might hear him say CX is kind 17 of the new term around that, and then internally the employee experience. 18 He said they had done some level of internal work, and actually had a 19 meeting last week, a facilitated discussion with probably half of their 20 employees to talk about what does customer experience look like and what 21 does it mean. He said this is taking a deeper dive into customer service, and 22 it was really something every employee is involved in in some sense and 23 some fashion. He said they were going to internally tee up a customer 24 experience vision to help guide them as they look at work that they do and 25 new projects that they were doing to try to make sure that they had that focus 26 on their customers. He said he was going to run through these quickly. He 27 said that data optimization, the business resilience, customer experience, 28 and employee experience, are the major themes and kind of buckets of work. 29 He said that he looked at them as four pillars for the future, but really 30 improvement areas for them to try to get focused on. He said that data 31 optimization is really regarding that they collect lots of data in all kinds of

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ways, so this is the first of a status report. He said that every six months they will come to the Board and do one of these updates to try to tell them where they are in a summary fashion. He said they were starting with looking at individual types of data, being able to classify that, and then look to bigger uses of how they integrate the data between different systems that they have. He said that some of them do that now, but the ultimate goal five years out is everything is integrated to where they can have dashboards that have connections with all this different information. He said that some of that they would have available for their customers, like the advanced metering project has a customer portal that was going to make data available to their customers when they finish that project. He said that a lot of this is going to be internal to better utilize what they had. He said that he was not going to go through every one of the projects, but there was some list in here of the status. He said they have what they called an internal playbook that is beginning, and they had more work to do, but it has all these different projects and how they break out. He said that as they look at the five-year period, what needs to happen, when and how do they sequence and time that with other projects that are going on, What staff was involved with it, resources and those kinds of things. He said the data pieces in his mind were two big things. He said that one is the integration between the systems, and the second one is a document management system. He said they still have a lot of paper documents that they need to convert to electronic documents to be able to take advantage of the new technology, so those are two big results of what they were trying to do with data. He said there was also wrapped around all these things that they were doing to try to protect security. He said they would see things like firewalls, part of their technology plan is looking at cybersecurity things. He said they have one of the cybersecurity federal agencies actually doing some testing on our systems to see if we have any issues that we need to address, but they were trying to shore it up both internally and then things like SCADA that are external to be sure that we have the right security protections in place.

Mr. Roberts asked if the percentages shown on the righthand side of the slide were achievements to date beginning July 1, 2023, and they had achieved 5% of their goals and objectives.

Mr. O'Connell said that was the intent. He said that if they got to 50%, they were halfway there, if they were at 100%, they were finished. He said that to be honest, it was an estimate at this point because they were so early in. He said that part of what he thinks they will do is they will get into the playbook further and schedule things out more so and can better define what 25% looks like and what 50% looks like. He said that it is an estimate to give them a gauge. He said that the Board may recall they used to use colors and they moved to this percentage gauge to give some sense of the status. He said that in most cases, they were early on.

Mr. Roberts asked if the plan began on July 1.

Mr. O'Connell said that some of the projects started a little bit earlier than that.

Mr. O'Connell said that it would be for the full calendar year of 2023, and they were proposing it run through the full calendar year of 2027. He said then they have some carryover projects, AMI is the biggest one with the advanced metering, and they were roughly halfway through that particular project.

Mr. Roberts said that they needed the percentages, and even with the estimate they needed to know where they were.

Mr. O'Connell said that they were there to give them some kind of gauge of where they were. He said that as time goes on, if it was still at 5%, it was going to be saying they were pretty far behind if they were three years into the project. He said there are a few of these that may not happen, the document management is probably one. He said they had to get through all the data classification, look at how they were going to do it, go through a proposal process, get the software in to be able to set up the document management system. He said it might stay at 5% for a couple of years until they get to that process.

1	Mr. Roberts said that he was sure that Dr. Palmer and himself would
2	be happy to see this done, because they mentioned they had none initially.
3	Ms. Swanson asked if they were at the point where Amazon Services
4	was storing all of this or if they were storing everything on-site.
5	Mr. O'Connell replied that it depended on which system. He said that
6	more and more things were going to the cloud, and he did not know that all
7	of them were on Amazon.
8	Ms. April Walker, Director of Information Technology, said that they
9	actually did not use Amazon, they used Azure, but yes, some of their
10	programs were starting to go to the cloud, such as some of their newer
11	softwares, but the majority of those were still on premises.
12	Ms. Swanson said that she would assume that there was an awful
13	lot of security that should come with that service.
14	Ms. Walker replied yes, it does.
15	Ms. Swanson asked if, as they were thinking about data longer term,
16	is there an idea about what type of data they were going to keep for how
17	long.
18	Ms. Walker said that they were very early in the project right now
19	where they were going to classify, first mapping all of their data, and it was
20	basically taking an inventory of where data comes from, where does it go.
21	She said after that, they were going to classify it and once they classify it will
22	be whether it is secure, confidential, whether it is public, FOIA-able data. She
23	said that after they classify all of that, they are going to strengthen their
24	security of each of the data items based on their classification. She said that
25	will change a lot of what they are currently doing.
26	Mr. O'Connell noted that the Library of Virginia requires certain
27	retention periods and destruction of certain types of documents at different
28	periods, so that was something they do, but will be incorporated in this
29	comprehensive evaluation as they looked at alternatives. He said the next
30	section is business resilience. He said that one piece is around the term
31	continuity planning, but really emergency response. He said the planning for

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that, Mr. Mike Lynn is leaving us as he heads towards retirement soon. He said that a pretty robust emergency response plan, they did a recent regional exercise on it. He said there was a lot of training and work that was going on to try to share that kind of information, and they were getting ready to work on the communications piece and crisis communications and that aspect of it as well. He said the Board approved the first-come, first-serve policy, which was one of the early projects, so that one is complete. He said that had been a policy that had been, in a sense, informal and they wanted to get it formalized as part of their rules and regulations. He said the next area is environmental sustainability, and these are really project driven to some extent with the philosophy of trying to be sure that they were a sustainable organization, that they were doing those kinds of things, particularly as they build new projects. He said they had ordered their first electric vehicle as an example, they were looking at solar at the Avon facility that will be under construction next spring, they hoped. He said they then did the energy audit that had a number of projects for them to work on to try to be more energy efficient and were finishing up most of that work. He said the final group, as they call it, is optimization of resources, but it was really them trying to be as efficient as possible. He said they were looking at different ways to do different things, in some cases, it may be technology. He said the minutes are on here is something that they were trying to find a nice balance between getting the Board the kind of information they need and it being a much more efficient, not as time-consuming as their previous process. He said there has been some internal restructuring and roles to take advantage of as staff changes occur, making sure the roles and responsibilities are pretty clear. He said that probably will go on as time goes on. He said there was also the issue about efficient use of this building and the space that they have. He said the next group is customer experience, and he thought the vision piece is an important part. He said they have a culture of good customer service and were trying to take a deeper dive to look harder at what they do to be sure that that experience in the end for their customers is a good one. He

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said the first big project was the customer experience itself, the vision workshop that they held last week. He noted that on some of the fees that they have, they had done some restructuring to try to consolidate those to make it easier for their construction customers to make those payments and streamline that process. He said a big project that was coming up is to replace their billing system. He said that it was bigger than just billing and was really about customer information, and that was the term that gets used, CIS, customer information system. He said they were looking at new software, they were also looking at website changes and phone system changes so that they were looking at all the data that they have on their customers and be sure that they mesh and work together. He said they were in the midst of finalizing a contract with a firm to help them go through an assessment, to be sure they were looking at all the right pieces, that they spec the right things so when they go out to buy the software and the hardware to make replacements of all those that they were going to get what they think they want and need and what their customers are saying that they need. He said that was a big project for them, multi-year, they were replacing a billing system that was 41 years old. He said they called it the senior citizen of the systems they have, but it was one that needs replacing with some modern technology, and with that will be a lot of information and tools that they have available for their staff to serve their customers and probably information for their customers to be able to use as well.

Dr. Palmer asked what their customers were asking for or what their customers want. She asked if there were specifics on that.

Mr. O'Connell said that the biggest one was probably how people can make payments. He said that part of the survey came back to say their website is a bit clunky in terms of payments. He said that depending on how they make their payment, they might have to go to two places rather than all be streamlined into one. He said there were some technology issues behind that to be able to implement that, but that was one of the big goals with the new billing system. He said they will probably get into how we present the

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bills to people, how they receive them. He said that he knew that Mr. Tolbert has been quite an advocate for this, and so, from his perspective, and they had this conversation with a couple different groups, the ACSA is the only provider of water in the community. He said, however, when it comes to items such as computer systems and how people pay their bills, in a sense, the ACSA is in competition with how people pay their bills to the banks and to other utilities, etcetera. He said they need to ramp up to that, and that was a big piece in my mind with the new billing system. He said there probably will be some focus groups that come along as they are making decisions about what would be the right thing to do for our customers and making sure that they are getting it modernized and it was going to work as smoothly as possible. He said they had learned in a couple of these big projects that it was important for them to spend a lot of planning time before we jump into actually buying a product. He said they were probably going to spend 9 months to 12 months just assessing where they need to go and then getting the specifications right to purchase.

Mr. Parcells asked about the idea of implementing something similar to what the County uses for paying their real estate and their property taxes and whatever. He said that in his mind, their method was pretty good and they were easy to use, and so that they were not reinventing the wheel.

Mr. O'Connell said they have a totally different database. He said the ACSA's is fee based and theirs is property taxpayer based. He said their group of customers is different than ours, so it was going to have to come off of the ACSA customer database to get to what the billing system is. He said they know there are more customer-friendly approaches out there, they just technology-wise have not been able to go to that, and this will be that particularly.

Mr. Parcells asked if Mr. O'Connell was saying that in a lot of cases, the software application is custom, so each time they come to a database set, they need to manipulate the software to utilize it, providing that kind of portal they want for the customer.

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Mr. O'Connell said to some extent, although they were oriented to a utility like theirs and like their size, they basically have those modules that can be purchased to be able to do different things. He said that part of what they want to match up to is to make sure that those systems will do what they think it will and make it as seamless as possible. He said the other one is to be able to connect with other pieces of data that we have and information. He said a big one would be getting from the meters and the readings into the billing system to get the bills to their customers.

Mr. Parcells said that when they had the interaction with multiple utilities last year and they had those takeaways, for example that they had a discussion, were there systems in there, payment systems that were favored over one other system that they could benefit from.

Mr. O'Connell said that to his knowledge, each utility had a different setup. He said that some communities are more active with electronic payment; they were above 70% now.

Mr. Lunsford said that it was more like 60%.

Mr. O'Connell said that about two-thirds of their customers make some kind of electronic bill payment. He said they want to make it as simple as possible, and they know it was not as simple as possible right now. He said without new software that was more modern to be able to do that, they really could not get to that goal. He said that what they heard in the survey was a lot of positives about things we do, but that was one that they need to improve, and it stuck with him. He said that one of the interviews that they did in the survey was a customer saying it was clunky. He said that was a big goal here. He continued that they were about halfway through with advanced metering, and they get a daily report on that. He said that at the end of that is one of our goals to have available for their customer an online portal that they can go and look at their own water use and get notifications and manage that if they want to. He said the ultimate goal will be that integrated in with the billing system so they can go to one place and see that and all their billing information. He said that another big piece on this was

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what they were calling customer engagement, but it was really educating their customers. He said they think they have a great story to tell, so they are ramping up some of the communications work that they were doing. He said they actually interviewed a couple of different firms to look at this. He said they are trying to negotiate a final contract with one of them, but to try to be sure they are present in community media, social media, information that they direct mail to our customers and try to ramp that up some so they do a much better job with what they share with our customers. He said the last group is what they were calling an employee experience. He said they have talked about this some and they had heard some of the challenges with succession as well. He said it was trying to do some proactive planning to look at succession throughout the organization. He said they had done that seven or eight different times in some pretty critical positions, and they have groups now that they heard Mr. Lynn talking about, like the construction inspectors, that is another area to focus. He said that as the marketplace has changed and it was getting harder to find employees when they have a vacancy, they were trying some new things to try to address that. He said they changed the background system check, for example, to a new system to try to speed that up. He said that was an ever-changing thing that they were having to adjust to. He said they are looking to ways to get their employees involved, to recognize their employees, and they had several different activities that are going on. He said they started a new employee of the month program that he thought has been well received. He said they let the Board know, but they were pretty regularly doing events that he looks at as employee appreciation, but trying to get their employees together as sort of a teambuilding exercise to some extent to get to know each other better. He said that unless they bring everybody together, they did not really see a lot of their fellow employees. He said they were doing a variety of those kind of things. He said the final group is a contingent emphasis on training and education for employees. He said that both functional training they need to do to be able to get their job done and then a lot of supervisory leadership

kind of training that they were doing in various ways, and as time goes on, they would get into that in more detail. He said that he would like to get the Board's concurrence on them moving into five years if they agree that that makes sense. He said that he did not know if the Board needed to vote or not, but they would like to be sure they were comfortable with that part of it if it made sense to them all.

Mr. Parcells said that he would expect that some of these would be complete before five years, and that was okay.

Mr. O'Connell said that ideally by the third year they would start to see some 50%, 75%, and some completed, but it was pretty ambitious. He said that most everything on here is something new, not something that they are currently doing. He said that AMI were obviously doing, but a lot of these are newer initiatives that will get them in a very different place in the next couple of years.

Mr. Parcells asked if Mr. O'Connell foresees that by going to five years, was there any way to assess the cost for the billing system plan.

Mr. O'Connell said that CIS, customer information in the billing system, was going to have a cost. He said that some of them are administrative reorganization, the way they do work, succession planning, construction inspection is probably not a cost item, so there was a variety of them that internal policies and that kind of thing. He said that some do have a cost that they would see come up in the in the budgets as they propose things.

Mr. Parcells said he agreed with making it five years instead of three years because some of this was pretty extensive to try to squeeze into three years.

Mr. O'Connell said that they would be, in reality, if it stayed at three years, carrying a lot of things over that raised the question of why not look at getting a game plan that gets it to the finish line. He said that was part of what the internal playbook that they were going use is really to, over that five years, see when things need to happen and breaking that out to kind of have

a structure to it. He said that also making sure that they did not have more than one big project going on at the same time and the other one was going on at the same stage so people did not get overloaded.

Mr. Parcells asked if they would say six months or something like that for a review.

Mr. O'Connell said they had it scheduled for January and July as next year's schedule, but every six months is the goal.

Mr. Roberts said the previous strategic plan was for three years, so they were going to go to five.

Mr. O'Connell said that most places did them over five years. He said that they had picked three years to some extent to be more aggressive in trying to get certain things done, but five years made more sense for them and gave them a good planning tool for what they want to accomplish. He said that if they involve the budget, they will be making budget proposals around that.

10. Items Not on the Agenda

Mr. O'Connell said he had two to three quick ones. He noted that they were finishing up the year-end financials and the audit report. He said it was traditional for the Board to have an audit committee. He stated that over the next month or so, Mr. Parcells and Mr. Tolbert had agreed, along with the Chair, to participate in it. He said that they would have the meeting and a formal presentation on the year-end financials and the audit report at the upcoming November meeting. He made the Board aware, because they may notice it in the media, that DuPont and 3M were involved in national settlements over PFAS. He explained that there was a settlement agreement going to every utility over a certain size in the country, and it would determine what PFAS impacts had occurred in those systems. He said they could either get in line for the settlement or opt out to go on their own on some kind of legal issue around that. He noted that they had legal documents coming that were being reviewed. He would like to come before the Board in October to

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give the pros and cons. He said that there were specialty water attorneys that they would want to talk to. He thought it was because they had not had major PFAS protections, which had been minimal, if at all. He said they had not had to spend money specifically on PFAS, so they would likely be at the end of the line. He said that the pool of money was in the billions of dollars. but there were thousands of utilities in the mix. He said that they thought it was important that the Board got involved in the conversation, and they would make a decision on how to move forward. He said the final one was on the next agenda, which was to start a discussion on what he called the roles and responsibilities. He said that he felt that there was a bit of a gap in some of the corporate documents about clarity. He said they considered a by-laws change that may address that. He said they looked at what a number of utilities were doing to see how they addressed it. He noted that he and Mike were working on a resolution to review signing authority and approvals, which got more specific. He noted that practically, it would not change anything. He reiterated that it would be on the next agenda along with the documents. He said they would come back a month later to request approval from the Board.

Ms. Palmer said that she wondered about some of the settlements, since they did not currently have a PFAS problem. She questioned whether the settlement disbursement would cover the legal costs of going out to other lawyers and consulting with water specialists. She said that it was just a comment.

Mr. O'Connell said that the water specialist they had talked to represented the state water association. He noted that indirectly, they had planned for that. He said that it did not make sense for them to go on alone. He said there would probably be a pool of money that would be distributed by the level of PFAS in the system and how much money was spent. He provided an example of the Cape Fear River that Dupont dumped directly into. He said they had spent billions on treatment facilities.

Ms. Swanson asked why the ACSA did not provide that.

1	Mr. O'Connell said it was one of the things they were exploring. He
2	said it was based on databases and state water permits. He noted the City
3	got the same settlement.
4	Ms. Swanson confirmed that the activated carbon removed that.
5	Mr. O'Connell responded that the activated carbon is the treatment
6	of choice. He explained that if they thought about it, it was an additional
7	barrier to remove PFAS. He said that it was likely that over the next year,
8	they would ramp up the level GAC at all of the treatment plants.
9	Ms. Palmer clarified that they had activated carbon filtration at every
10	plant.
11	Mr. O'Connell said that was correct.
12	Ms. Palmer asked if it was powdered.
13	Mr. O'Connell responded that it was in the big canisters. He said that
14	it was one of the big decisions related to renovating that plant.
15	Ms. Palmer asked if it treated all of the water.
16	Mr. O'Connell responded that at this point, it treated roughly 50% of
17	the water. He explained that the issue was, for PFAS or other contaminants,
18	as they moved towards 100% treatment, GAC had to be changed out, and
19	there was a cost to the replacement, but the cost was either included in this
20	CIP or the next one. He indicated there was an update out at Crozet going
21	on right now that would do that. He said it would just be a small one, but it
22	was a start.
23	Ms. Palmer said they could consider one at North Fork.
24	
25	11. <u>Adjourn</u>
26	There being no further business, Dr. Palmer moved that the
27	meeting be adjourned, seconded by Mr. Parcells. All members voted
28	aye.
29	
30	Gary B. O'Connell, Secretary-Treasurer

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: Monthly Financial

Reports

STAFF CONTACT/PREPARER:

Quin Lunsford, Director of Finance

AGENDA DATE: October 19, 2023

ACTION: Informational

ATTACHMENTS: Yes

BACKGROUND: Water and sewer financial reports and check registers for the month of September are attached for your review.

DISCUSSION:

- Water consumption for the month of August increased 10.7% compared to July. Water consumption for the month of August 2023 compared to August 2022 increased 6.7%.
- RWSA's invoice of \$2,352,440 for the month of August was paid on September 8, 2023.
- Unearned water and sewer connection charges totaled \$1,493,058 at month end.
- System connection charges are slightly ahead of budgeted expectations with \$482,000 recognized in September.
- Water and Wastewater revenues for FY 2024 are above budgeted expectations by 13.4%. Please see the water/wastewater trend analysis included illustrating that when adjustment for expected variations in seasonal consumption are considered, revenues are 2.0% higher than budgeted expectations.

BUDGET IMPACT: Informational only.

RECOMMENDATIONS: None

BOARD ACTION REQUESTED: None; informational item only.

ATTACHMENTS:

- 1. Statement of Net Position
- 2. Year-to-Date Budget to Actual Comparison/Commentary
- 3. Investment Summary
- 4. Capacity/System Development Reserves
- 5. Connection Charges/ERC Analysis
- 6. Monthly Water and Sewer Charges from the RWSA
- 7. Monthly Water Consumption
- 8. Water and Sewer Report; Customer Class Report
- 9. Major Customer Analysis
- 10. Water/Wastewater Revenue Trend Analysis
- 11. Aged Receivables Analysis
- 12. Check Register

ALBEMARLE COUNTY SERVICE AUTHORITY

STATEMENT OF NET POSITION September 30, 2023

ASSETS

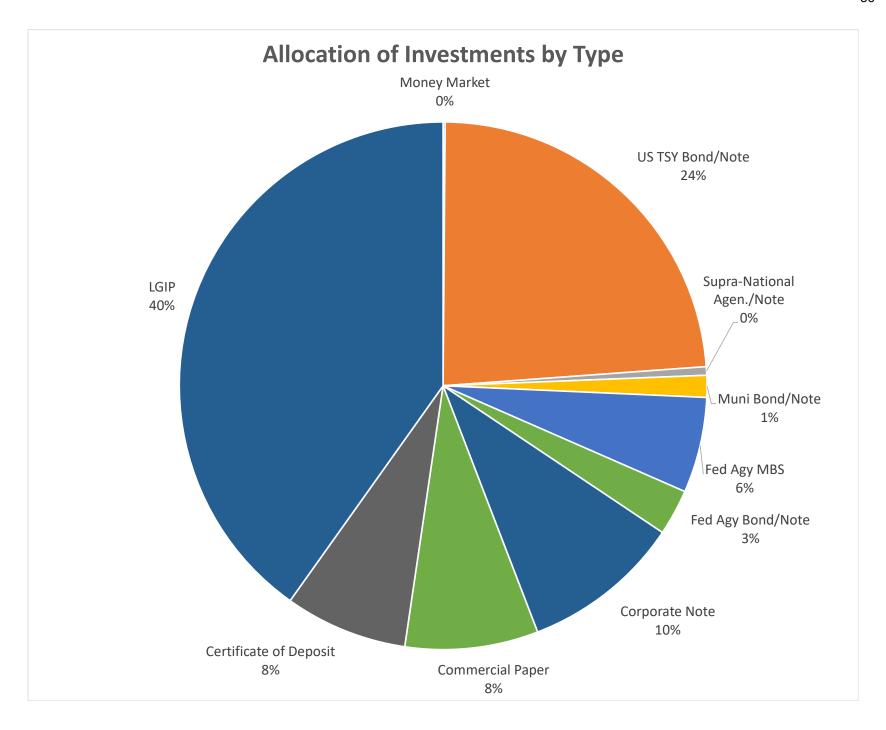
Cash and cash equivalents	\$ 8,436,068
Accounts receivable	5,646,209
Investments	50,162,420
Capital assets: (net of accumulated depreciation)	180,880,851
Inventory	589,039
Prepaids	2,897
Cash and cash equivalents, restricted	 774,242
Total assets	 246,491,726
DEFENDED OVER OWG OF DEGOVERGES	
DEFERRED OUTFLOWS OF RESOURCES	1 175 050
Combined deferred outflows of resources	 1,175,852
LIABILITIES	
Accounts payable	2,597,852
Accrued liabilities	527,088
Compensated absences	746,495
Net pension liability	2,454,029
Other post-employment benefits	1,244,519
Unearned connection fees	1,493,058
Long-term debt	 4,570,883
Total liabilities	13,633,924
DEFERRED INFLOWS OF RESOURCES	
Combined deferred inflows of resources	 1,104,953
NET POSITION	 232,928,701
TIDE I OBITION	 232,720,701

ALBEMARLE COUNTY SERVICE AUTHORITY For the One Month Ending September 30, 2023

	Budget FY 2023	Budget Year-to-Date 2023	September Actual Year-to-Date	Actual vs. Budget	Variance Percentage
Revenues	2020	2020	Tour to Date	Dauget	rerectinge
Water Sales Sewer Service	20,580,000. 16,679,000.	5,145,000. 4,169,750.	6,072,603. 4,488,025.	927,603. 318,275.	18.03% 7.63%
Total operating revenues	37,259,000.	9,314,750.	10,560,628.	1,245,878.	13.38%_A
Operating Expenses					
Purchase of bulk water Purchase of sewer	(16,256,000.)	(4,064,000.)	(4,197,895.)	(133,895.)	3.29% B
treatment Administration Finance	(11,689,000.) (1,475,500.) (2,890,000.)	(2,922,250.) (368,875.) (722,500.)	(2,796,829.) (310,613.) (630,218.)	125,421. 58,262. 92,282.	(4.29%) B (15.79%) C (12.77%) C
Information Technology Engineering Maintenance Total operating	(1,787,600.) (2,400,300.) (4,749,900.)	(446,900.) (600,075.) (1,187,475.)	(483,918.) (559,240.) (858,553.)	(37,018.) 40,835. 328,922.	8.28% C (6.80%) C (27.70%) C
expenses	(41,248,300.)	(10,312,075.)	(9,837,266.)	474,809.	(4.60%)
Operating gain(loss)	(3,989,300.)	(997,325.)	723,362.	1,720,687.	(172.53%)
Nonoperating Revenues					
System connection charges Investment/Interest	8,000,000.	2,000,000.	2,172,755.	172,755.	8.64% D
Income Rental income Miscellaneous revenues	600,000. 16,000. 761,000.	150,000. 4,000. 190,250.	575,039. 3,646. 154,087.	425,039. (354.) (36,163.)	283.36% E (8.85%) (19.01%) F
Total nonoperating revenues (expenses)	9,377,000.	2,344,250.	2,905,527.	561,277.	23.94%
Nonoperating Expenses					
Miscellaneous expenses Bond interest charges Depreciation	(327,300.) (183,859.) 0.	(81,825.) (45,965.) 0.	(3,004.) (1,079,803.)	78,821. 45,965. (1,079,803.)	(96.33%) G (100.00%) H 0.00% I
Total nonoperating revenues (expenses)	(511,159.)	(127,790.)	(1,082,807.)	(955,017.)	747.33%
Capital contributions	0.	0.	860,947.	860,947.	0.00%
Change in Net Position	4,876,541.	1,219,135.	3,407,029.	2,187,894.	179.46%

Albemarle County Service Authority Actual-to-Budget Year to Date Commentary

- **A.** Water and sewer revenues were more than budgeted amounts by 13.4%. Consumption through September (gallons) appears reasonable considering the ACSA's normal seasonal consumption pattern. Further information related to seasonal revenue expectations can be found later in the Board packet.
- **B.** Expenses related to purchases of bulk water and sewer treatment from the RWSA are more than budgeted amounts by 0.12%. Monthly billings prepared by the RWSA allocate total water/wastewater flows to the ACSA/City based on the consumption of each for the guarter immediately preceding.
- C. Departmental operating budgets through the current month remain below budgeted expectations for the fiscal year with the exception of Information Technology which is slightly higher than expectations. Variations early in the fiscal year are expected as the timing of expenses can more greatly impact variances. Departmental expenses will continue to be monitored throughout the fiscal year and are expected to align with the budget.
- **D.** System connection charges are higher than the budgeted amount. Connection charges are often difficult to project and can fluctuate from year to year. These charges are dependent upon new customers connecting to the system.
- **E.** Investment income, which includes both interest income and adjustments to fair market value are recorded in these accounts. Investment earnings are ahead of budgeted expectations through the current month.
- **F.** Miscellaneous revenues consist of multiple lines and include inspection fees, plan review, reconnections/initial bill fees, invoiced water usage, and gains associated with sales of capital assets retired from service.
- **G.** The budgeted amount includes expected outlays for capital equipment and losses on disposal of capital assets. Equipment is capitalized when placed in service.
- **H.** Bond interest charges are recorded as incurred.
- **I.** Depreciation is not a budgeted line-item accounting for the variance. Depreciation expense is considered during the annual budgeting process as this expense is utilized to calculate the required contribution to the 3r reserve.





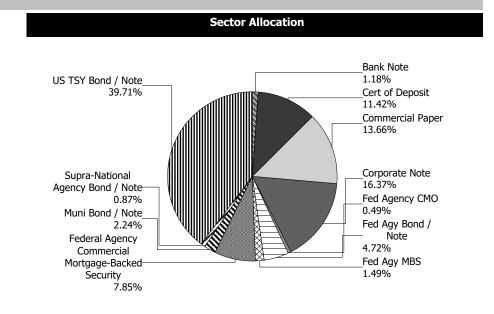
Portfolio Summary and Statistics

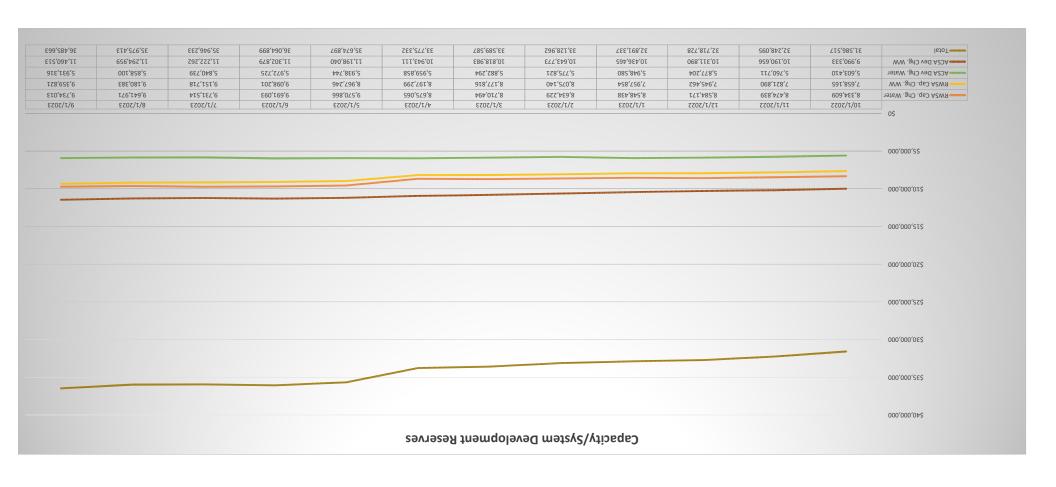
For the Month Ending **September 30, 2023**

ACSA OPERATING FUNDS - 03100100

Account Summary						
Description	Par Value	Market Value	Percent			
U.S. Treasury Bond / Note	12,285,000.00	11,898,071.16	39.71			
Supra-National Agency Bond / Note	265,000.00	260,285.65	0.87			
Municipal Bond / Note	680,000.00	670,828.40	2.24			
Federal Agency Mortgage-Backed Security	487,723.91	445,315.96	1.49			
Federal Agency Commercial	2,454,391.24	2,350,205.36	7.85			
Mortgage-Backed Security						
Federal Agency Collateralized Mortgage	150,000.00	146,605.37	0.49			
Obligation						
Federal Agency Bond / Note	1,445,000.00	1,413,706.27	4.72			
Corporate Note	5,060,000.00	4,905,250.24	16.37			
Commercial Paper	4,200,000.00	4,092,202.20	13.66			
Certificate of Deposit	3,425,000.00	3,419,950.81	11.42			
Bank Note	355,000.00	353,784.48	1.18			
Managed Account Sub-Total	30,807,115.15	29,956,205.90	100.00%			
Accrued Interest		205,235.31				
Total Portfolio	30,807,115.15	30,161,441.21				

Unsettled Trades 0.00 0.00





Note: Additions to Capacity/System Development Reserves are from monthly connection charges, reductions to the reserves are from monthly growth related expenses/capital costs.

Albemarle County Service Authority Connection Fee Analysis August 2023

		Aug	ust 20	23		
		ugust 2023 Monthly		ugust 2022 Monthly	\$	%
Area	Con	nection Fees	Con	nection Fees	Change	Change
Crozet	\$	516,645	\$	242,460	\$ 274,185	113%
Urban		590,850		406,400	184,450	45%
Scottsville		300		-	300	
Total Connection fees	\$	1,107,795	\$	648,860	\$ 458,935	71%
		Through	ı Augu	st		
	Y	TD FY 2024	Υ	TD FY 2023	\$	%
Area	Con	nection Fees	Con	nection Fees	Change	Change
Crozet	\$	800,475	\$	350,220	\$ 450,255	129%
Urban		889,700		1,097,675	(207,975)	-19%
Scottsville		300		-	300	-
Total Connection fees	\$	1,690,475	\$	1,447,895	\$ 242,580	17%
	A	ugust 2023	А	ugust 2022		%
Area		ERC's		ERC's	Change	Change
Crozet		36		18	18	100%
Urban		41		30	11	37%
Scottsville		-		-	-	-
Total ERC's		77		48	29	60%
		Through	_			
	Υ	TD FY 2024	Υ	TD FY 2023		%
Area		ERC's		ERC's	Change	Change
Crozet		55		26	29	112%
Urban		61		82	(21)	-26%
Scottsville		_		_	-	-
Scottsville						

Note: This analysis shows, both in dollars and ERC's, connections by month and YTD for the period under review. As noted above, connection fees are comparable to the prior year. See the "Three Year Connection Fee Comparison" for further discussion related to this change.

Albemarle County Service Authority Three Year Connection Fee Comparison August 2023

Area	August 2023 ERC's	August 2022 ERC's	August 2021 ERC's
Crozet	36	18	9
Urban	41	30	96
Scottsville	-	-	
Total ERC's	77	48	105

Through August									
YTD 2024 YTD 2023 YTD 2022 Area ERC's ERC's ERC's									
Crozet	55	26	16						
Urban	61	82	114						
Scottsville	-	-	-						
Total ERC's - YTD	116	108	130						

Note: The information above present ERCs by month and YTD for the current and past two fiscal years. As noted in the YTD portion of the analysis, YTD ERCs in Fiscal Year 2023 appear reasonable considering continued development within the ACSA's service area.

Albemarle County Service Authority Water and Sewer Charges from the RWSA Fiscal Year 2024

		FY 2024		FY 2023	Increase		
	RW	/SA Charges	RV	VSA Charges	(D	ecrease)	
July	\$	2,352,971	\$	2,041,957	\$	311,014	15.23%
August		2,352,440		2,042,399		310,041	15.18%
September		2,286,484		2,083,284		203,200	9.75%
October				2,021,265			
November				1,987,793			
December				2,025,214			
January				1,990,411			
February				1,956,978			
March				2,006,071			
April				2,013,296			
May				2,021,900			
June				1,979,565			
	\$	6,991,895	\$	24,170,133			
YTD	\$	6,991,895	\$	6,167,640	\$	824,254	13.36%

Note: The charges noted above from the RWSA include operating and debt service charges.

Albemarle County Service Authority Consumption Analysis Fiscal Year 2024

				Monthly Prec	ipitation (In.)
	FY 2024 Consumption	FY 2023 Consumption		FY 2024	FY 2023
July	154,300,020	155,932,214	-1.05%	5.44	6.42
August	170,746,002	159,969,362	6.74%	2.51	4.10
September		155,676,979	-100.00%		2.79
October		152,513,014	-100.00%		2.24
November		148,761,821	-100.00%		4.52
December		134,997,083	-100.00%		4.60
January		138,803,649	-100.00%		2.32
February		126,909,570	-100.00%		2.87
March		134,395,216	-100.00%		1.36
April		140,263,055	-100.00%		4.67
May		140,578,641	-100.00%		2.31
June		163,336,945	-100.00%		4.81
	325,046,022	1,752,137,549		7.95	43.01
YTD	325,046,022	315,901,576	2.89%	7.95	10.52

Note: Consumption through August 2023 is 2.89% more than the same period in fiscal year 2023. Monthly precipitation figures have been included for comparison purposes. Trends in rainfall can sometimes correlate with trends in consumption however, depending on the intensity, days between rain events, or other factors, this may not always be the case.

Note: Precipitation data obtained from National Oceanic and Atmospheric Administration (NOAA): https://www.ncdc.noaa.gov/cdo-web/search.



Water and Sewer Report

(Volumes in Gallons)

August 2023

Metered by Area:		Water	Sewer
Crozet		18,157,381	15,579,643
Scottsville		1,610,333	826,623
Urban		150,943,950	121,867,223
Red Hill	_	34,338	0
	Total	170.746.002	138.273.489

Wastewater Flows by Sewer Plant:					
Moore's Creek AWRRF	137,446,866				
less Glenmore	(4,188,619)				
Urban Total	133,258,247				
Scottsville	826,623				
Total	134,084,870				

Number of Installed Me	ters:	
Urban		32
Crozet		24
Scottsville		0
	Total	56

Hydrant Meter Consumption (billed by invoice):								
Urban		1,037,600						
Crozet		1,400						
Scottsville		0						
au	otal	1,039,000						

Estimated Water Loss:		
N/A		
	Total	0

Billed Consumption for Selected Customers

	<u>Water</u>	<u>Sewer</u>		<u>Water</u>	<u>Sewer</u>
Virginia Land Holding	283,882	283,882	Boar's Head Inn	769,162	735,953
Southwood Mobile Homes	1,803,660	2,100,000	Farmington, Inc.	1,144,553	511,928
Turtle Creek Apartments	1,448,872	1,446,296	Westgate Apts.	1,259,678	1,258,078
Barracks West Apartments	1,840,278	1,840,278	Abbington Crossing	2,044,947	2,044,947
Monroe Health and Rehab.	1,299,186	1,299,186	Four Seasons Apts	1,475,251	1,475,251
Sunrise Senior "Colonnades"	1,021,947	786,847	Ch'ville/Alb Airport	221,136	221,045
ACRJ	1,145,890	945,890	State Farm	1,880,590	1,780,311
Westminster Canterbury	1,980,810	1,874,810	Hyatt @ Stonefield	480,153	480,153
SEMF Charleston	1,562,157	1,562,157	Doubletree	1,012,981	1,012,981
Martha Jefferson Hospital	2,885,209	1,230,650	Arden Place Apts.	467,285	467,285
Crozet Mobile Home Village	270,335	270,335	Hilton Garden Inn	281,728	255,016
The Home Depot	152,064	152,064	The Blake @Charlottesville	322,682	322,682
County of Albemarle	1,725,336	883,637	The Lodge @ Old Trail	242,193	242,193
University of Virginia	2,237,573	2,234,804	Gov't-Defense Complex	1,056,742	997,407
Wegmans	655,530	655,530	Harris Teeter Stores	201,785	201,785

Customer Class Report



August 2023

WATER

Class Type	Number of Connections by Area					
	<u>Urban</u>	Crozet	Scottsville	<u>Total</u>		
Single-Family Residential	16,027	3,862	195	20,084		
Multi-Family Residential	564	44	3	611		
Commercial (Offices)	202	12	5	219		
Commercial (Other)	933	76	53	1,062		
Industrial	36	11	4	51		
Institutional	171	32	12	215		
Total Water Connections	17,933	4,037	272	22,242		
Plus Multiple Units	13,103	781	89	13,973		
Total Water Units	31,036	4,818	361	36,215		

SEWER

Class Type	Number of Connections by Area						
	<u>Urban</u>	Crozet	<u>Scottsville</u>	<u>Total</u>			
Single-Family Residential	13,717	3,586	157	17,460			
Multi-Family Residential	533	42	4	579			
Commercial (Offices)	186	12	5	203			
Commercial (Other)	726	52	44	822			
Industrial	15	5	1	21			
Institutional	133	25	10	168			
Total Sewer Connections	15,310	3,722	221	19,253			
Plus Multiple Units	12,687	778	56	13,521			
Total Sewer Units	27,997	4,500	277	32,774			

POPULATION SERVED

Population served is the total Single-Family and Multi-Family units using an occupancy of 2.5 residents per unit:

	<u>Urban</u>	Crozet	Scottsville	<u>Total</u>
Total Water Customers	72,825	11,608	710	85,143
Total Sewer Customers	66,010	10,910	533	77,453

Albemarle County Service Authority Major Customer Analysis August 2023 and July 2023

	Augus	t 2023	July 2023		Increase(Decrease)	Increase(Decrease)
	Water*	Sewer*	Water*	Sewer*	Water Consumption	Sewer Usage
Barracks West Apartments	1,840,278	1,840,278	1,343,601	1,343,601	36.97%	36.97%
Westmisnster Canterbury	1,980,810	1,874,810	1,472,340	1,392,340	34.53%	34.65%
ACRJ	1,145,890	945,890	882,100	750,100	29.90%	26.10%
Martha Jefferson Hospital	2,885,209	1,230,650	2,341,938	1,200,838	23.20%	2.48%
County of Albemarle	1,725,336	883,637	1,444,323	612,602	19.46%	44.24%
Turtle Creek Apts.	1,448,872	1,446,296	1,219,554	1,218,744	18.80%	18.67%
Westgate Apts.	1,259,678	1,258,078	1,150,741	1,148,541	9.47%	9.54%
University of Virginia	2,237,573	2,234,804	2,115,343	2,109,522	5.78%	5.94%
Southwood Mobile Homes	1,803,660	2,100,000	1,716,770	2,310,000	5.06%	-9.09%
Abbington Crossing	2,044,947	2,044,947	1,968,136	1,968,136	3.90%	3.90%
Four Seasons Apts.	1,475,251	1,475,251	1,470,206	1,470,206	0.34%	0.34%
SEMF Charleston	1,562,157	1,562,157	1,632,747	1,632,747	-4.32%	-4.32%

Note: Only major customers of the ACSA have been analyzed above. For purposes of this analysis, major customers are those who, on average, consume over one million gallons per month. Variations can occur for a variety of reasons including but not limited to: conscious conservation efforts, expansion, weather, vacancies, etc.

^{* --} Consumption/usage in gallons.

Albemarle County Service Authority Major Customer Analysis August 2023 and August 2022

	August	August 2023		2022	Increase(Decrease)	Increase(Decrease)
	Water*	Sewer*	Water*	Sewer*	Water Consumption	Sewer Usage
County of Albemarle	1,725,336	883,637	1,173,029	791,820	47.08%	11.60%
Abbington Crossing	2,044,947	2,044,947	1,745,808	1,745,808	17.13%	17.13%
SEMF Charleston	1,562,157	1,562,157	1,353,682	1,353,682	15.40%	15.40%
Barracks West Apartments	1,840,278	1,840,278	1,594,700	1,594,700	15.40%	15.40%
Turtle Creek Apts.	1,448,872	1,446,296	1,257,919	1,250,019	15.18%	15.70%
Martha Jefferson Hospital	2,885,209	1,230,650	2,587,614	740,524	11.50%	66.19%
Westmisnster Canterbury	1,980,810	1,874,810	1,787,040	1,688,040	10.84%	11.06%
Four Seasons Apts.	1,475,251	1,475,251	1,399,052	1,399,052	5.45%	5.45%
Westgate Apts.	1,259,678	1,258,078	1,279,530	1,278,730	-1.55%	-1.62%
Southwood Mobile Homes	1,803,660	2,100,000	2,025,000	2,400,000	-10.93%	-12.50%
ACRJ	1,145,890	945,890	1,311,910	983,910	-12.65%	-3.86%
University of Virginia	2,237,573	2,234,804	2,756,864	2,746,540	-18.84%	-18.63%

Note: Only major customers of the ACSA have been analyzed above. For purposes of this analysis, major customers are those who, on average, consume over one million gallons per month. Variations can occur for a variety of reasons including but not limited to: conscious conservation efforts, expansion, weather, vacancies, etc.

^{* --} Consumption/usage in gallons.

Albemarle County Service Authority Major Customer Analysis

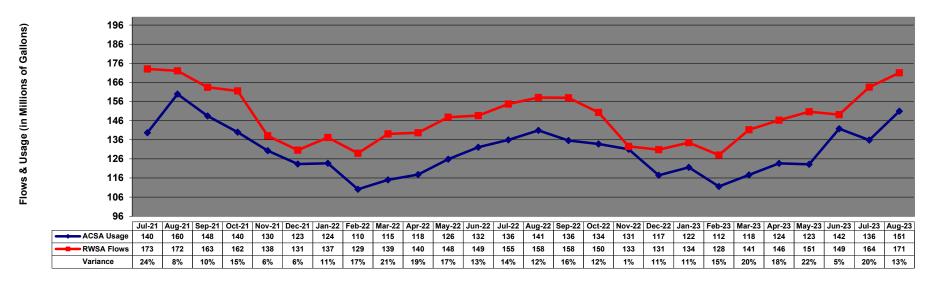
Year-to-date Comparison: Current Year/Prior Year -- August

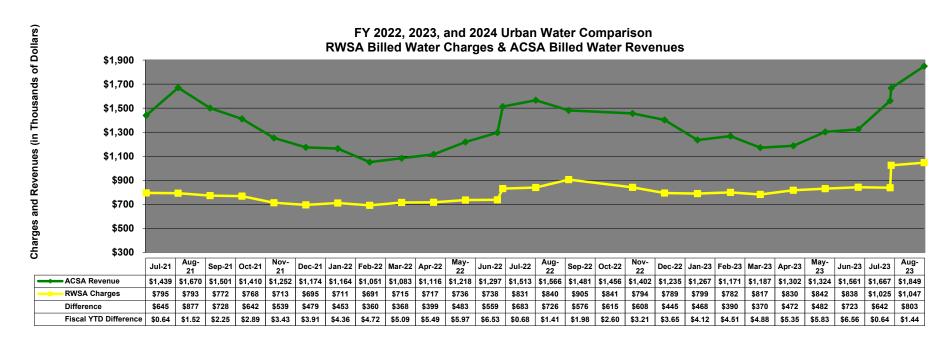
	YTD FY	FY 2024 YTD FY 2023		Increase(Decrease)	Increase(Decrease)	
	Water*	Sewer*	Water*	Sewer*	Water Consumption	Sewer Usage
County of Albemarle	3,169,659	1,496,239	2,099,576	1,491,246	50.97%	0.33%
Turtle Creek Apts.	2,668,426	2,665,040	2,343,683	2,330,683	13.86%	14.35%
SEMF Charleston	3,194,904	3,194,904	2,818,483	2,818,483	13.36%	13.36%
Abbington Crossing	4,013,083	4,013,083	3,671,974	3,671,974	9.29%	9.29%
Martha Jefferson Hospital	5,227,147	2,431,488	4,964,550	1,706,119	5.29%	42.52%
Westmisnster Canterbury	3,453,150	3,267,150	3,341,730	3,127,730	3.33%	4.46%
Barracks West Apartments	3,183,879	3,183,879	3,120,100	3,120,100	2.04%	2.04%
Four Seasons Apts.	2,945,457	2,945,457	2,967,273	2,967,273	-0.74%	-0.74%
Westgate Apts.	2,410,419	2,406,619	2,512,423	2,508,323	-4.06%	-4.05%
ACRJ	2,027,990	1,695,990	2,332,190	1,837,190	-13.04%	-7.69%
Southwood Mobile Homes	3,520,430	4,410,000	4,064,000	4,500,000	-13.38%	-2.00%
University of Virginia	4,352,916	4,344,326	5,143,821	5,127,138	-15.38%	-15.27%

Note: Only major customers of the ACSA have been analyzed above. For purposes of this analysis, major customers are those who, on average, consume over one million gallons per month. Variations can occur for a variety of reasons including but not limited to: conscious conservation efforts, expansion, weather, vacancies, etc.

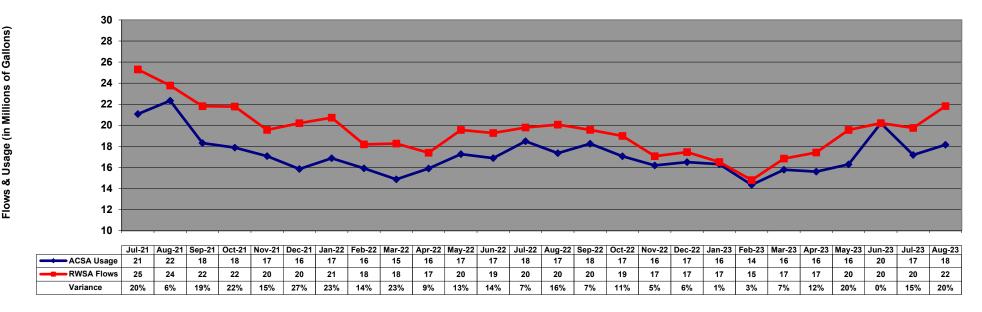
^{* --} Consumption/usage in gallons.

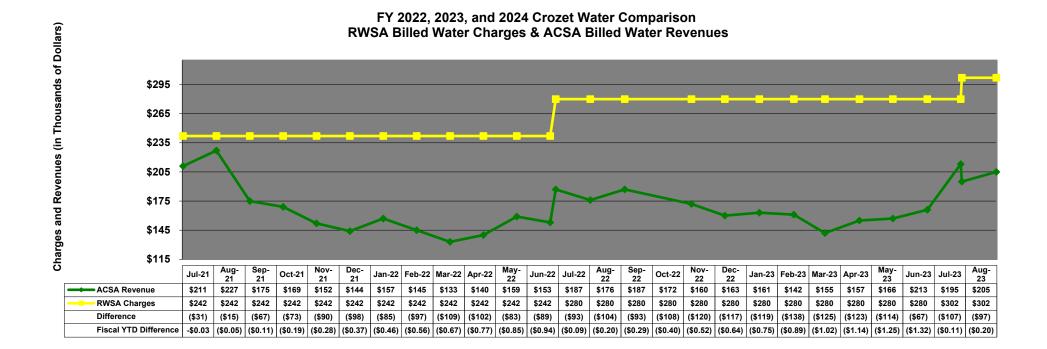
FY 2022, 2023, and 2024 Urban Water Comparison RWSA Flows & ACSA Customer Usage



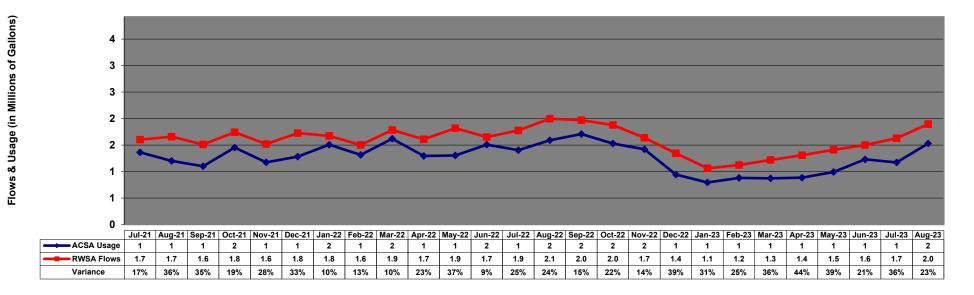


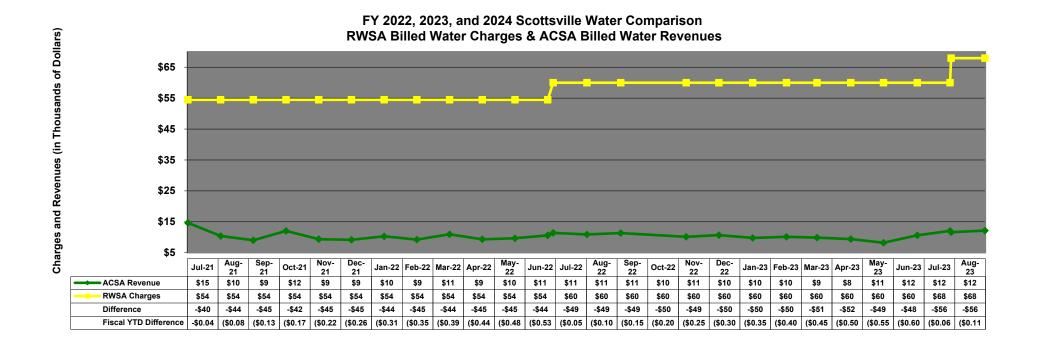
FY 2022, 2023, and 2024 Crozet Water Comparison RWSA Flows & ACSA Customer Usage



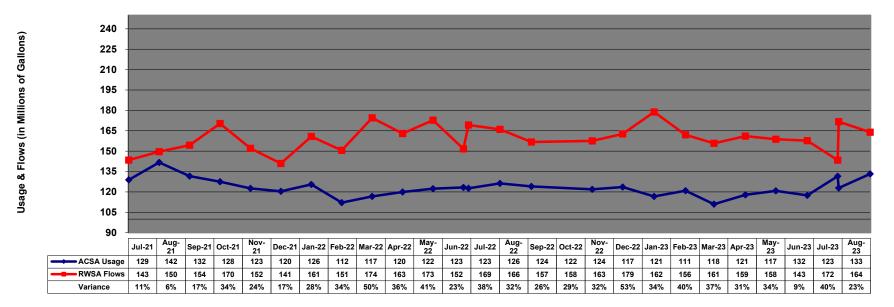


FY 2022, 2023, and 2024 Scottsville Water Comparison RWSA Flows & ACSA Customer Usage

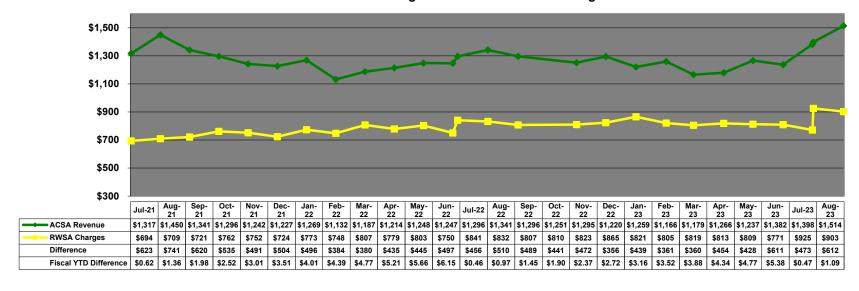




FY 2022, 2023, and 2024 Urban (including Glenmore) & Crozet Sewer Comparison ACSA Customer Usage & RWSA Flows

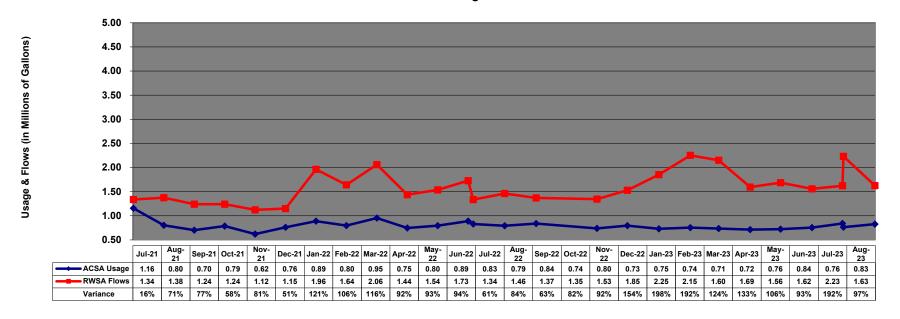


FY 2022, 2023, and 2024 Urban (including Glenmore) & Crozet Sewer Comparison ACSA Billed Sewer Usage & RWSA Billed Sewer Charges

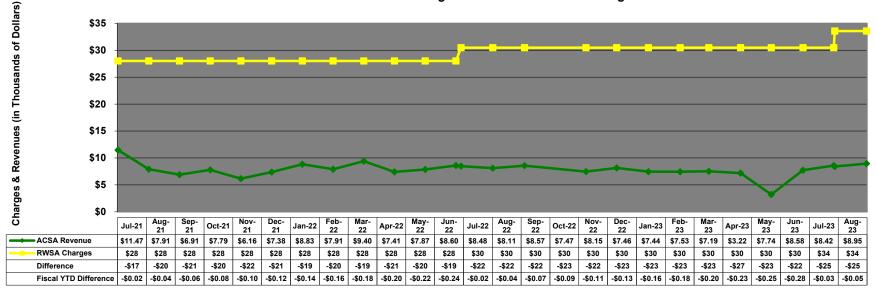


Charges & Revenues (in Thousands of Dollars)

FY 2022, 2023, and 2024 Scottsville Sewer Comparison ACSA Customer Usage & RWSA Flows



FY 2022, 2023, and 2024 Scottsville Sewer Comparison ACSA Billed Sewer Usage & RWSA Billed Sewer Charges



Single-Family Residential Water Usage

(Including irrigation through exclusion, irrigation, and auxiliary meters)

	FY 2022											
	July	August	September	October	November	December	January	February	March	April	May	June
Level 1 (0 - 3,000 gallons)	45,715,768	46,650,649	45,763,766	45,032,204	45,171,862	45,419,967	45,519,835	43,528,147	44,213,375	44,847,991	45,928,802	46,038,996
Level 2 (3,001 - 6,000 gallons)	18,273,794	20,170,499	17,049,266	15,725,032	15,151,382	14,875,487	15,122,551	12,929,554	12,730,722	13,260,281	16,086,013	16,576,525
Level 3 (6,001 - 9,000 gallons)	6,123,440	7,439,890	5,100,810	4,617,427	3,808,811	2,996,781	3,076,904	2,659,279	2,230,016	2,424,233	3,744,303	4,334,397
Level 4 (over 9,000 gallons)	8,544,212	14,373,474	7,815,394	7,173,929	4,280,811	2,811,464	3,100,290	2,921,259	1,746,818	1,865,133	3,644,494	5,309,110
Total	78,657,214	88,634,512	75,729,236	72,548,592	68,412,866	66,103,699	66,819,580	62,038,239	60,920,931	62,397,638	69,403,612	72,259,028

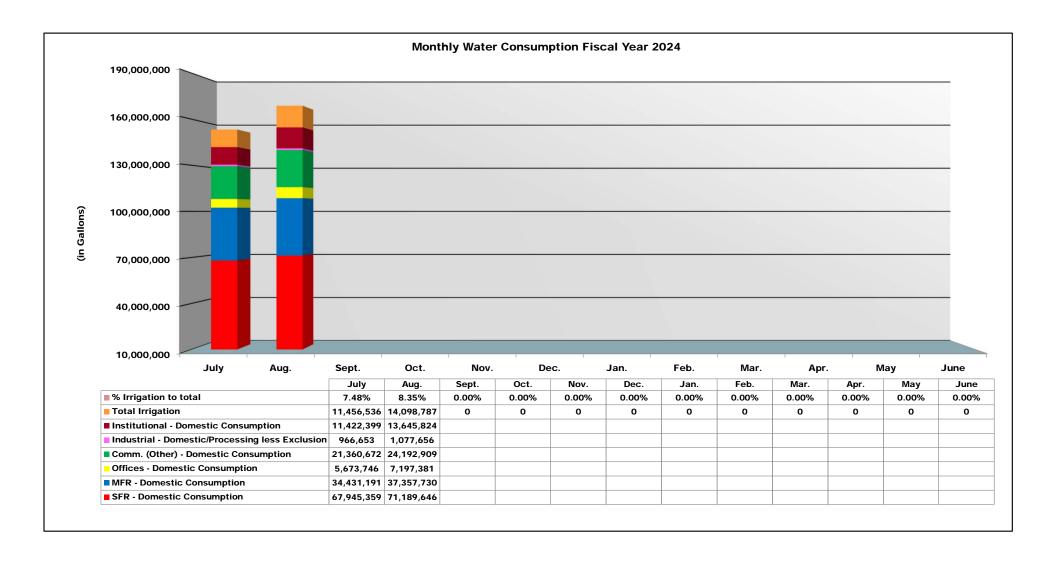
		FY 2023										
	July	August	September	October	November	December	January	February	March	April	May	June
Level 1 (0 - 3,000 gallons)	45,599,911	45,505,082	45,632,349	45,357,143	45,992,076	45,339,022	45,820,263	44,448,040	45,016,715	45,670,222	45,561,576	49,568,558
Level 2 (3,001 - 6,000 gallons)	16,363,636	15,612,084	15,525,446	15,374,370	15,677,968	13,744,408	14,908,443	12,546,428	13,038,674	13,819,163	14,442,933	18,264,878
Level 3 (6,001 - 9,000 gallons)	4,849,724	4,363,645	4,161,371	4,369,132	3,918,235	2,545,163	2,943,662	2,117,866	2,182,828	2,638,653	3,330,195	5,919,761
Level 4 (over 9,000 gallons)	7,208,522	6,639,465	6,037,842	6,071,945	4,079,700	2,079,589	2,271,075	1,540,953	1,196,536	1,979,431	3,435,895	6,675,863
Total	74,021,793	72,120,276	71,357,008	71,172,590	69,667,979	63,708,182	65,943,443	60,653,287	61,434,753	64,107,469	66,770,599	80,429,060

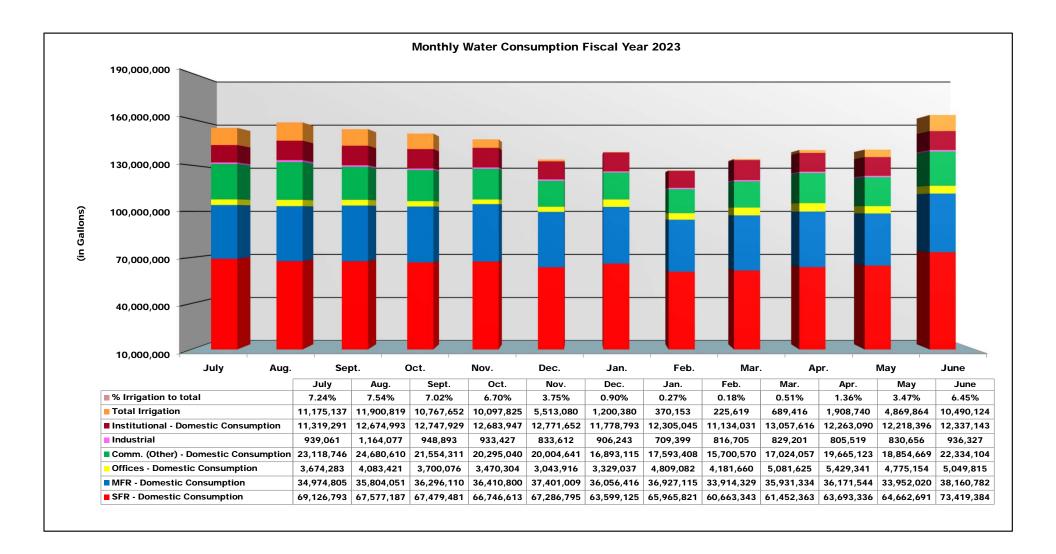
		FY 2024										
L 1.4 (2 . 0.000 II)	July	August	September	October	November	December	January	February	March	April	May	June
Level 1 (0 - 3,000 gallons) Level 2 (3,001 - 6,000 gallons)	46,186,939 15,834,490											
Level 3 (6,001 - 9,000 gallons)	4,271,446	4,916,430										
Level 4 (over 9,000 gallons)	5,743,519	6,973,528										
Total	72,036,394	75,677,317	-	-	-	-	-	-	-	-	-	-

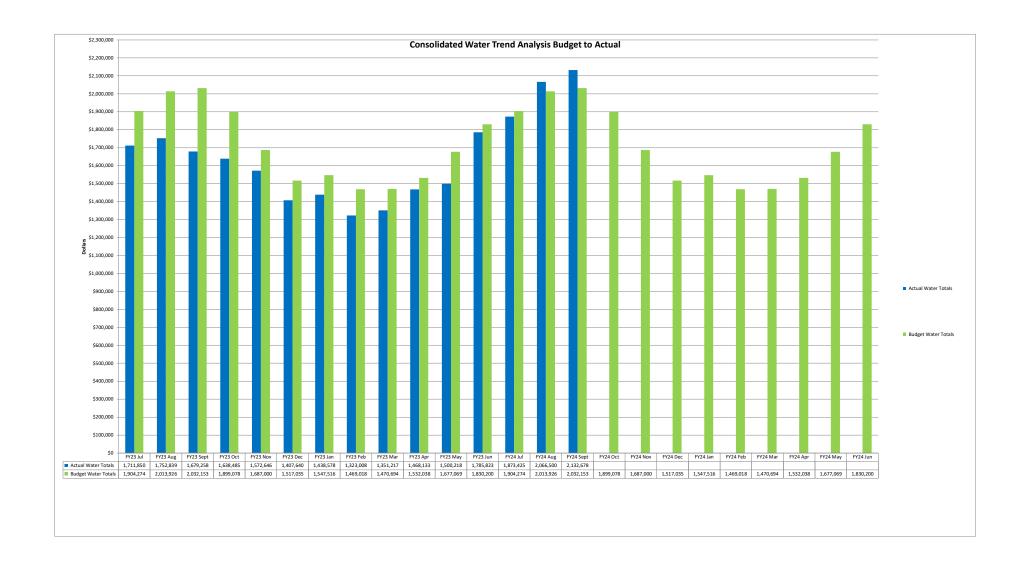
System-Wide Irrigation Water Usage

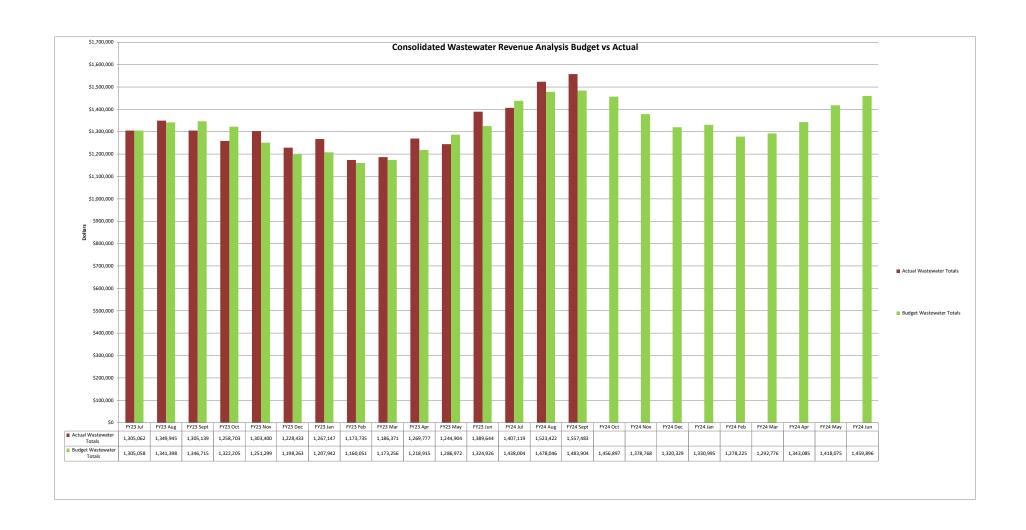
(All usage measured through exclusion, irrigation, and auxiliary meters)

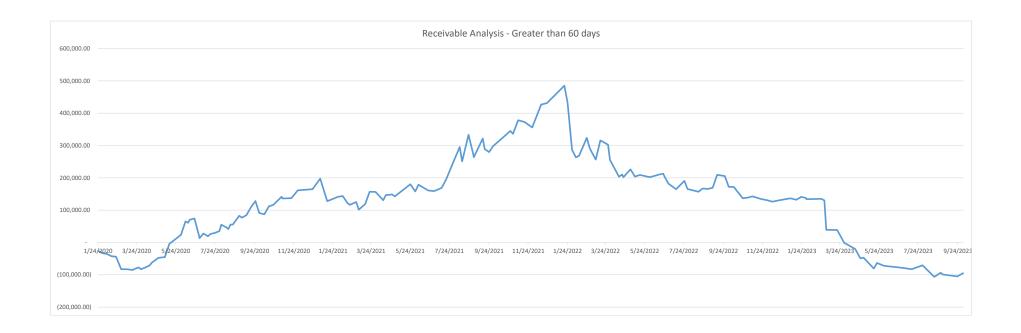
FY 2024	July	August	September	October	November	December	January	February	March	April	May	June
Level 1 (0 - 3,000 gallons)	145,819	127,806										
Level 2 (3,001 - 6,000 gallons)	657,224	542,994										
Level 3 (6,001 - 9,000 gallons)	717,195	648,971										
Level 4 (over 9,000 gallons)	9,936,298	12,779,016										
				•								
Total	11,456,536	14,098,787	-	-	-	-	-	-	-	-	-	











Albemarle County Service Authority September 2023 Payments

CHECK NUMBER	CHECK DATE	VENDOR NAME	AMOUNT	DESCRIPTION OVER \$5,000
Wire	09/06/2023			Bulk Water & Sewer Treatment
67975		Core & Main LP	392,544.23	AMI - Hardware/Hosting/Software/Installation
67739		Core & Main LP	261,896.84	AMI - Hardware/Hosting/Software/Installation
07739	09/01/2023		170,841.32	Net Pay
	09/13/2023	·	•	Net Pay
401004007			168,665.37	
481894807		IRS - Federal Tax Deposit	69,385.13	Payroll
67738		Commonwealth Excavating	68,780.77	Jefferson Village WMRP Retainage
486381963		IRS - Federal Tax Deposit	62,665.67	Payroll Daht Samiaa
Wire		The Bank of New York Mellon	43,288.40	Debt Service
67775		Paymentus Corporation	42,277.60	Transaction Fees for
67998		M C Dean Incorporated	41,982.39	SCADA Phase 3 SPO
67979	09/15/2023	· -	37,308.00	Avon Property Bid/Con
486381962	09/29/2023	County of Albemarle	35,708.68	Payroll
68026		Virginia Asphalt Services Inc	32,965.00	Caitlin Road Tar & Gravel & Cul-de-sac at end of Fontana Court
486381959		Virginia Retirement System	31,342.49	Payroll
68030		Ferguson US Holdings Inc	25,775.44	Inventory - Meter Stock
67981		E Source Companies LLC	19,220.34	AMI Project - Phase 3
67802		U S Postmaster	18,000.00	Bulk Mail Permit 205
67969	09/15/2023	Brown, Edwards & Company LLP	15,000.00	FY 2023 Financial Statement and Compliance Audit
481894802	09/15/2023	Nationwide	14,688.63	Payroll
67987		Fortiline Incorporated	13,836.84	Inventory - Coupling Breaking and various
67968	09/15/2023	Bank of America	12,232.18	Supplies, Memberships, Tools, Travel, Software
481894808	09/15/2023	Virginia Dept of Taxation	11,380.87	Payroll
67988	09/15/2023	Fortiline Incorporated	10,940.00	Inventory - Box Valve Riser
486381964	09/29/2023	Virginia Dept of Taxation	10,770.77	Payroll
67757	09/01/2023	Fortiline Incorporated	8,182.52	Inventory - Setter Meter & Coupling Straight
67752	09/01/2023	EWT Holdings III Corporation	8,150.13	Bioxide Delivery
68025	09/15/2023	Cellco Partnership	7,572.49	Monthly Cellular Service
68019	09/15/2023	Todd Thorpe	7,300.00	Tree removal - Ashcroft Upper Tank & Georgetown PS
67740	09/01/2023	Cornwell Engineering Group	5,801.50	Glenmore Water Quality
67986	09/15/2023	Flora Pettit PC	5,530.00	General Representation
67786	09/01/2023	RSG Landscaping LLC	5,142.19	Landscaping
481894805	09/15/2023	Valic	5,045.00	Payroll
486381961	09/29/2023	Valic	5,045.00	Payroll
486381958	09/29/2023	Nationwide	4,334.65	
67999	09/15/2023	Mansfield Oil Company of Gainesville	4,216.33	
67771	09/01/2023	ODP Business Solutions LLC	4,152.29	
67768	09/01/2023	Mansfield Oil Company of Gainesville	3,893.17	
67750	09/01/2023	Ed's Floor Care Services LLC	3,703.33	
67747	09/01/2023	Dominion Energy Virginia	3,640.15	
67980	09/15/2023	Dominion Energy Virginia	3,545.63	
481894801	09/15/2023	ICMA Membership Renewals	3,364.60	
486381957	09/29/2023	ICMA Membership Renewals	3,364.60	
68028	09/15/2023	Whitman, Requardt & Assoc LLP	3,320.10	
68000	09/15/2023	MSB Coach	3,286.00	
67800	09/01/2023	Top Quality Home Improvements LLC	3,199.77	
67996	09/15/2023	Lowe's	3,189.21	
67776	09/01/2023	PFM Asset Management LLC	3,021.84	
67785	09/01/2023	Stemmle Plumbing Repair Inc	2,915.00	
67789	09/01/2023	Siemens Industry Inc.	2,512.54	
68023	09/15/2023	UniFirst Corporation	2,255.55	

67778	09/01/2023	The Pitney Bowes Bank Incorporated	2,000.00
67803	09/01/2023	UniFirst Corporation	1,907.12
67995	09/15/2023	L/B Water Service Incorporated	1,893.84
67783	09/01/2023	Rappahannock Electric Cooperative	1,861.58
67748	09/01/2023	Duncan Parnell	1,825.00
67796	09/01/2023	Macro Retailing LLC	1,686.90
486381965	09/29/2023	Flexible Benefit	1,671.50
67737	09/01/2023	Comcast	1,669.68
67722	09/01/2023	Aquatic Informatics, Inc.	1,631.00
68027	09/15/2023	VA Utility Protection Service Inc	1,593.90
481894810	09/15/2023	ACSA Flexible Spending	1,588.65
486381966	09/29/2023	ACSA Flexible Spending	1,588.65
67724	09/01/2023	The Bank of New York Mellon	1,500.00
67744	09/01/2023	Timothy J Johnson	1,495.00
67804	09/01/2023	United Rentals (North	1,468.55
67767	09/01/2023	Mailing Services of Virginia	1,442.16
481894809	09/15/2023	Flexible Benefit	1,427.00
67732	09/01/2023	Carter Machinery Company Incorpor	1,415.16
67753	09/01/2023	Ferguson US Holdings Inc	1,378.77
67997	09/15/2023	Luck Stone Corporation	1,223.25
68002	09/15/2023	ODP Business Solutions LLC	1,163.69
67966	09/15/2023	Ascensus	1,150.00
67790	09/01/2023	Southwest Distributors LLC	1,088.40
67784	09/01/2023	Rexel USA Incorporated	1,050.31
68013	09/15/2023	Rivanna Water & Sewer Authority	970.08
67805	09/01/2023	University Tire & Auto	932.20
68035	09/15/2023	Minnesota Life Insurance Co	923.22
68134	09/29/2023	Minnesota Life Insurance Co	916.84
67964	09/15/2023	Aqua Air Laboratories Inc	900.00
68012	09/15/2023	Rivanna Solid Waste Authority	899.00
67984	09/15/2023	Ferguson US Holdings Inc	862.33
68033	09/15/2023	Guardian	845.03
68132	09/29/2023	Guardian	844.95
486381960	09/29/2023	AFLAC	758.47
67977	09/15/2023	Cues Incorporated	752.73
67994	09/15/2023	LB Technology Incorporated	700.00
67807	09/01/2023	VACORP	686.00
68001	09/15/2023	MXI Environmental Services LLC	665.00
67736	09/01/2023	Comcast	643.44
68031	09/15/2023	ACAC	602.50
68130	09/29/2023	ACAC	602.50
67978	09/15/2023	Lee Enterprises Incorporated	596.40
67777	09/01/2023	Wanda L Phillips	589.21
67795	09/01/2023	Stanley Martin	559.79
68021	09/15/2023	The Artina Group	533.61
67743	09/01/2023	Crown Castle	530.45
67808	09/01/2023	VLGMA	525.00
67801	09/01/2023	Troy's Auto & Diesel LLC	516.20
68024	09/15/2023	USABlueBook	508.90
67982	09/15/2023	Education & Training Services	499.00
67751	09/01/2023	Elite Contractors Incorporated	495.94
67745	09/01/2023	Ditch Witch of Roanoke Incorporated	474.34
67788	09/01/2023	S L Williamson Company Inc	460.75
67730	09/01/2023	Campbell Equipment Inc	459.96
67970	09/15/2023	Campbell Equipment Inc	459.96
67973	09/15/2023	Charles M Boldt	457.81

67718	09/01/2023	John R V Mayo	425.70
67726	09/01/2023	John Bauman	413.81
68038	09/15/2023	Treasurer of Virginia	398.40
68137	09/29/2023	Treasurer of Virginia	398.40
67990	09/15/2023	Hathaway Solutions LLC	386.24
67763	09/01/2023	Hathaway Solutions LLC	342.02
67728	09/01/2023	Brink's Incorporated	311.25
68015	09/15/2023	CM Turf	306.00
67809	09/01/2023	Protocol SSD Corporation	301.86
67781	09/01/2023	Quality Welding Inc.	299.50
67731	09/01/2023	Capital Lighting & Supply LLC	296.19
68022	09/15/2023	U. S. Bank	291.67
67962	09/15/2023	Carsons LLC	275.94
68010	09/15/2023	Ricoh USA Incorporated	275.00
67721	09/01/2023	Appalachian Power	262.66
67769	09/01/2023	Martin Horn	262.54
67793	09/01/2023	CM Turf	224.00
67791	09/01/2023	SiteOne Landscape Supply Holding LI	213.15
68008	09/15/2023	Republic Services	208.54
68005	09/15/2023	Rosemary Krayniak	200.00
67770	09/01/2023	Noel Mathias	196.91
67971	09/15/2023	MWP Supply Incorporated	187.75
68036	09/15/2023	Piedmont Family YMCA	185.40
67725	09/01/2023	Marti Bassard-Spry	152.08
67779	09/01/2023	W & H Resources Incorporated	149.00
67989	09/15/2023	Gingerich Outdoor Power Spec	144.96
68029	09/15/2023	William A Wells	140.00
67792	09/01/2023	Kurt Slangerup	137.75
68014	09/15/2023	S L Williamson Company Inc	131.27
67965	09/15/2023	Reubin Armond	128.61
67729	09/01/2023	Sandra Byrd	126.52
67759	09/01/2023	Gingerich Outdoor Power Spec	121.96
68018	09/15/2023	TSRC Incorporated	121.11
67723	09/01/2023	Atlantic Machinery Incorporated	120.90
67780	09/01/2023	Iris Puryear	119.30
68009	09/15/2023	Rexel USA Incorporated	118.95
67963	09/15/2023	American Pest Incorporated	118.00
67765	09/01/2023	Wisconsin Quick Lube Inc	117.39
67983	09/15/2023	FedEx	112.10
67806	09/01/2023	HD Supply Facilities Maint LTD	110.95
67719	09/01/2023	Advance Stores Company Inc	108.35
67993	09/15/2023	Price Chevrolet Company	105.50
67773	09/01/2023	Yury Varshavsky	100.00
68003	09/15/2023	Amanda McMillen	100.00
68004	09/15/2023	Barbara Ruddy	100.00
68006	09/15/2023	William Nixon	100.00
68135	09/29/2023	Piedmont Family YMCA	96.30
68007	09/15/2023	Timmie Petze	96.00
67749	09/01/2023	Kelly Dunham	89.94
67967	09/15/2023	Bailey Printing Incorporated	85.00
68017	09/15/2023	Lois Stokes	82.98
67960	09/15/2023	Advance Stores Company Inc	82.73
67782	09/01/2023	Mark Radlinski	79.74
67810	09/01/2023	William A Wells	70.00
67992	09/15/2023	James River Communications Inc	70.00
67746	09/01/2023	Document Destruction of	69.95
3,, 40	00,01,2020		55.55

68034	09/15/2023	Herbert Beskin Trustee	67.50
68133	09/29/2023	Herbert Beskin Trustee	67.50
67727	09/01/2023	Laurence Briggs	65.51
67772	09/01/2023	Barbara & George Van Osten	60.00
68011	09/15/2023	Rivanna Associates Incorporated	60.00
68037	09/15/2023	Snap Fitness	59.94
68136	09/29/2023	Snap Fitness	59.94
67720	09/01/2023	Carsons LLC	59.00
67991	09/15/2023	Abigail Horn	58.01
67742	09/01/2023	Cove Creek Industries Incorporated	56.00
67766	09/01/2023	Robert Lennon	55.11
68016	09/15/2023	Specialty Fasteners of	55.00
67755	09/01/2023	Fisher Auto Parts Incorporated	47.88
67798	09/01/2023	TSRC Incorporated	47.48
67797	09/01/2023	Emily Swift	42.13
67756	09/01/2023	Flexible Benefit Administrators Inc	41.25
67762	09/01/2023	Robert Haggard	40.48
67972	09/15/2023	Central Virginia Electric Cooperative	36.03
67761	09/01/2023	Greenwood Homes	35.00
67733	09/01/2023	Culpeper Auto Parts Incorporated	33.22
67774	09/01/2023	Mary Ann & Louis Paulovich	32.39
67734	09/01/2023	City of Charlottesville	29.77
67754	09/01/2023	First Rate Realty	24.29
67764	09/01/2023	Tim & Jamie Hoagland	22.11
67985	09/15/2023	Fisher Auto Parts Incorporated	21.49
68032	09/15/2023	Anytime Fitness-Pantops	20.00
68131	09/29/2023	Anytime Fitness-Pantops	20.00
67735	09/01/2023	Gerald Coleman	17.94
67799	09/01/2023	Jennifer Tomlin	17.63
67758	09/01/2023	Julie Gee	16.23
67794	09/01/2023	Specialty Fasteners of	13.76
67974	09/15/2023	City of Charlottesville	12.90
67787	09/01/2023	Ruday Properties LLC	10.65
67760	09/01/2023	Godfrey Property Management	10.40
67976	09/15/2023	Crozet Hardware Co., Inc.	8.79
68020	09/15/2023	Thryv Incorporated	6.50
67961	09/15/2023	Advance Auto Parts	5.94
67741	09/01/2023	County of Albemarle	5.00

4,149,125.05

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: FY 2024 Capital Improvement Program (CIP) Report

STAFF CONTACT(S)/PREPARER:

Jeremy M. Lynn, P.E., Director of

Engineering

AGENDA DATE: October 19, 2023

CONSENT AGENDA:

ACTION: ■ INFORMATION: ■

ATTACHMENTS: YES

BACKGROUND: Monthly CIP Memo including a status report on active CIP Projects and a list of Active Private Development Projects.

DISCUSSION:

Questions about the status of active CIP Projects.

• Questions about the status of active Private Development Projects.

BUDGET IMPACT: None.

RECOMMENDATIONS: None.

BOARD ACTION REQUESTED: Approval of the Consent Agenda.

ATTACHMENTS:

- Monthly CIP Report
- List of Active Private Development Projects

Albemarle County Service Authority (ACSA) Capital Improvement Project Report October 2023

Water System CIP Projects

1. Crozet Phase 4 Water Main Replacement (Account Code 1756):

Consultant: Michael Baker International, Inc. (Baker)

Project Status: Construction

Percent Complete: 0%

Contractor: Undetermined
Construction Start: January 2024
Completion: July 2025
Total Budget: \$6,534,400
Appropriated Funds: \$588,156

Project Description: This project continues our systematic program to replace the aging and undersized asbestos-cement and PVC water mains in the Crozet Water System. Roads impacted by water replacement work include Crozet Avenue (Route 240), Rockfish Gap Turnpike (Route 250), Hillsboro Lane, Brownsville Road, and the neighborhood streets in Park View. This is the fourth of five phases that have been defined to carry out these improvements.

10/10/2023: On September 6, 2023, three bids were received with Valley Contracting, LLC (dba Valley Earth and Pipe) being the apparent low bidder. Baker has prepared a letter of recommendation to award the contract along with a bid tab. A Board authorization is proposed for this project.

2. Scottsville Phase 4 Water Main Replacement (Account Code 1758):

Consultant: Whitman, Requardt & Associates, Inc. (WRA)

Project Status: Design Percent Complete: 90%

Contractor: Undetermined

Construction Start: 2024
Completion: 2026
Total Budget: \$6,804,900
Appropriated Funds: \$499,410

Project Description: This project continues our systematic program to replace undersized and deteriorating asbestos-cement and cast-iron water mains throughout our water distribution system. Roads impacted by water replacement work include James River Road, Warren Street, Hardware Street, Moores Hill, and the downtown streets of Page, Bird, and West Main. This project requires extensive coordination with the Rivanna Water and Sewer Authority (RWSA) as it includes the replacement of their asbestos-cement water main along James River Road.

10/10/2023: Comments on the 90% Design Documents have been returned to WRA. A Board authorization is proposed for this project.

3. Ragged Mountain Phase 1 Water Main Replacement (Account Code 1760):

Consultant: Dewberry Engineers, Inc. (Dewberry)

Project Status: Design Percent Complete: 90%

Contractor: Undetermined
Construction Start: Undetermined
Completion: Undetermined
Total Budget: \$1,218,400
Appropriated Funds: \$203,614

Project Description: This project will replace the oldest active water main remaining in our system serving residents along Fontaine Avenue Extended and Reservoir Road. This cast iron pipe is over 90 years old and is severely tuberculated, which significantly reduces the flow capacity in this section.

10/10/2023: Dewberry anticipates submitting the Draft Technical Memorandum by the end of October 2023.

4. Northfields Water Main Replacement (Account Code 1764):

Consultant: OBG, A Ramboll Company (Ramboll)

Project Status: Design Percent Complete: 90%

Contractor: Undetermined

Construction Start: 2026
Completion: 2027
Total Budget: \$8,530,000
Appropriated Funds: \$655,997

Project Description: This project continues our systematic program to replace the aging and undersized asbestos-cement water mains in our system. The existing water mains are approximately 55 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.

10/10/2023: The 90% Design Documents have been received and they are under review by ACSA staff.

5. <u>Huntington Village Water Connection (Account Code 1770)</u>:

Consultant: ACSA Engineering Department

Project Status: Design Percent Complete: 100%

Contractor: Undetermined

Construction Start: 2024 Completion: 2024 Total Budget: \$60,700 Appropriated Funds: \$3,533

Project Description: The existing water main that serves as the only feed into Huntington Village off Old Ivy Road is at risk of failure due to an existing rock retaining wall that was constructed overtop of the water main. This project provides a second water connection into Huntington Village which is comprised of approximately 135 residential customers.

8/9/2023: The 100% Design Documents have been completed by ACSA staff. Construction for this project will take place following award of the upcoming Annual Water Services Contract that is nearing design completion.

6. Briarwood Water Main Replacement (Account Code 1766):

Consultant: OBG, A Ramboll Company (Ramboll)

Project Status: Design Percent Complete: 50%

Contractor: Undetermined

Construction Start: 2026
Completion: 2027
Total Budget: \$2,220,000
Appropriated Funds: \$255,338

Project Description: This project continues our systematic program to replace PVC water mains that have been in service since the early 1980's and have recently experienced several breaks causing water service disruptions.

8/9/2023: ACSA staff have provided comments on the revised geotechnical boring plan prepared by Ramboll. Ramboll is transitioning to a new project manager, and they are working on the 90% Design Documents.

7. Barracks West Water Main Replacement (Account Code 1796):

Consultant: Dewberry Engineers, Inc. (Dewberry)

Project Status: Design Percent Complete: 90%

Contractor: Undetermined

Construction Start: 2024
Completion: 2025
Total Budget: \$3,402,000
Appropriated Funds: \$218,191

Project Description: This project will replace the undersized and aging cast iron and galvanized water mains that were installed in the late 1960's. These water mains are original to the Old Salem Apartments development, now called Barracks West. This project follows our Strategic Plan goal to replace aging and undersized water mains throughout our system and will provide for an opportunity to improve fire protection to these multi-family apartments.

10/10/2023: Dewberry has received comments from VDOT on the 90% Design Documents and are incorporating their comments into the final

design documents. ACSA staff anticipates beginning easement discussions with the property owner before the end of October 2023.

8. Townwood Water Main Replacement (Account Code 1773):

Consultant: Dewberry Engineers, Inc. (Dewberry)

Project Status: Design Percent Complete: 50%

Contractor: Undetermined

Construction Start: 2028
Completion: 2028
Total Budget: \$1,300,000
Appropriated Funds: \$169,180

Project Description: This project continues our systematic program to replace PVC water mains that have been in service since the early 1980's and have recently experienced several breaks causing water service disruptions.

10/10/2023: Comments on the 50% Design Documents have been returned to Dewberry.

9. Broadway Street Water Main Replacement (Account Code 1768):

Consultant: Whitman, Requardt & Associates, Inc. (WRA)

Project Status: Design Percent Complete: 90%

Contractor: Undetermined

Construction Start: 2024
Completion: 2024
Total Budget: \$1,417,800
Appropriated Funds: \$128,000

Project Description: This project will replace the ductile iron water main that was installed in the early 1970's and has been found to be in deteriorating condition based on recent excavations. With the redevelopment of the Woolen Mills Factory and Albemarle County's increased attention on economic revitalization of this corridor, replacement of this water main is crucial in transforming this area.

9/12/2023: ACSA and County staff met on August 23, 2023, to discuss the County's status of their Broadway Blueprint initiative, with no conflicts anticipated between the two projects. ACSA staff have identified the need to acquire one easement along Broadway Street, and we have begun the process of contacting the property owner.

10. Raintree and Fieldbrook Water Main Replacement (Account Code 1771):

Consultant: Michael Baker International, Inc. (Baker)

Project Status: Design Percent Complete: 50%

Contractor: Undetermined

Construction Start: 2027

Completion: 2028

Total Budget: \$6,432,300 Appropriated Funds: \$290,887

Project Description: This project continues our systematic program to replace the PVC water mains in the Raintree and Fieldbrook subdivisions that have been in service since the early 1980's. In addition to replacing these PVC mains, this project will also eliminate pipe saddles at the water service connections that have been failing due to corrosion.

8/9/2023: With construction currently scheduled for FY 2027 and FY 2028, ACSA staff have strategically identified this project as one to put in hold until we have made significant progress on higher priority projects. ACSA staff has received the 50% Design Documents from Baker.

11. Lewis Hill – West Leigh Water Connection (Account Code 1754):

Consultant: ACSA Engineering Department

Project Status: Design Percent Complete: 95%

Contractor: Undetermined

Construction Start: 2024
Completion: 2024
Total Budget: \$80,900
Appropriated Funds: \$7,125

Project Description: An existing PVC water main that serves as a connection between West Leigh Subdivision and Lewis Hill Subdivision was found to be compromised due to the encroachment of a nearby stream. The water main has been taken out of service to avoid a catastrophic failure and the resulting large volume of lost water. This project re-establishes the connection from West Leigh by taking advantage of the recent water main replacement along Sheffield Road with an 8-inch diameter pipe.

9/12/2023: The Lewis Hill HOA has indicated a preference for the ACSA to follow the alternative route that requires them granting a new easement. They have indicated their desire to have a third-party appraiser determine the value of the easement, so they are in the process of having the easement appraised.

12. Exclusion Meters Replacement (Account Code 1759):

Consultant: ACSA Engineering Department

Project Status: Construction

Percent Complete: 40%

Contractor: ACSA Maintenance Department

Construction Start: September 2019

Completion: 2024
Total Budget: \$742,500
Appropriated Funds: \$247,500

Project Description: 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 all future irrigation meters be tapped separately off our water mains. 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 exclusion meters in our system.

10/10/2023: ACSA Maintenance crews have remobilized to perform follow-up restoration efforts in the Darby Road (west) section of Glenmore. ACSA staff are working to develop a pilot program for an alternative approach, which will utilize the services of the customer's irrigation contractor to upgrade the meter to be compatible with our AMI system with the ACSA covering these costs. ACSA staff is working with one customer in Still Meadows on this pilot approach. There are currently 296 private irrigation exclusion meters remaining in our system.

Sewer System CIP Projects

13. Sewer Pump Station Comminutors (Account Code 1827):

Consultant: Whitman, Requardt & Associates, Inc. (WRA)

Project Status: Construction

Percent Complete: 100%

Contractor: East Coast Utility Contractors, Ltd. (ECUC)

Construction Start: July 2022

Completion: September 2023

Total Budget: \$731,300 Appropriated Funds: \$616,193

Project Description: Three sewer pump stations: Glenmore, Georgetown Green, and Crozet have all experienced higher than normal amounts of solid debris that have caused undue wear and tear on our pumps, reducing their effective life. They have also been subjected to clogging from the fibrous cloth wipes that are marketed as flushable but do not break down in the sanitary sewer collection system. Maintenance identified the need to install comminutors (aka grinders) in the wet wells or just upstream of them, to eliminate these solids that are adversely impacting our pumps.

10/10/2023: WRA has provided minor comments to ECUC on the O&M manuals. Following approval of the revised O&M manuals, final payment will be made to ECUC. This project will be removed from the CIP list.

14. Madison Park Pump Station Upgrade (Account Code 1735):

Consultant: Whitman, Requardt & Associates, Inc. (WRA)

Project Status: Construction

Percent Complete: 0%

Contractor: Anderson Construction, Inc. (ACI)

Construction Start: October 2022
Completion: November 2024
Total Budget: \$1,940,000
Appropriated Funds: \$2,003,831

Project Description: This wastewater pump station was constructed in the early 1980's by private development and the original equipment is nearing the end of its useful life. Additionally, the building is undersized creating difficulty in performing routine maintenance and making it impossible to install the control panels necessary to include this pump station in our new SCADA System.

10/10/2023: WRA has approved the pump skid and control submittal, allowing ACI to update their construction schedule.

15. Airport Trunk Sewer Upgrade (Account Code 1828):

Consultant: Michael Baker International, Inc. (Baker)

Project Status: Design Percent Complete: 90%

Contractor: Undetermined

Construction Start: 2026
Completion: 2028
Total Budget: \$6,183,800
Appropriated Funds: \$378,459

Project Description: With the continued growth in the Hollymead Town Center area, the existing sewer collector serving the airport and the area west of Route 29 has insufficient capacity to handle full build-out. The existing sewer was originally sized to serve the light industrial zoning designated for that area at the time of construction. The increased density specified in the County Comprehensive Plan for the same drainage basin will exceed the capacity of the existing sewer. A study of the drainage basin was completed in 2016 with the recommendation the sewer main be increased in size by replacing it in place.

8/9/2023: The private development team has shared the ACSA's current design drawings with multiple contractors to obtain feedback on any construction challenges and to better understand the financial impacts. To date, 8 of 24 easements have been obtained.

16. Bellair - Liberty Hills Sewer (Account Code 1829):

Consultant: Michael Baker International, Inc. (Baker)

Project Status: Design Percent Complete: 50%

Contractor: Undetermined

Construction Start: 2025 Completion: 2026 Total Budget: \$6,393,715

Appropriated Funds: \$380,295

Project Description: Over the past several years, there has been an uptick in residents of the Bellair Subdivision seeking to connect to public sanitary sewer service since most residents are currently served by private septic fields. To gauge community interest for such a project, ACSA staff mailed out a survey to the residents seeking feedback on their interest. Based on initial feedback received, many of the property owners are interested in connecting to public sewer if it was made available.

8/9/2023: ACSA staff is working with Baker to revise the design to minimize the areas within the neighborhood that will be served by E/One systems. ACSA staff is discussing how to best deploy E/One systems on an ACSA project.

17. <u>Biscuit Run Sewer Replacement (Account Code 1830)</u>:

Consultant: OBG, A Ramboll Company (Ramboll)

Project Status: Construction

Percent Complete: 0%

Contractor: Undetermined

Construction Start: 2024
Completion: 2024
Total Budget: \$479,600
Appropriated Funds: \$756,419

Project Description: During a routine inspection, the ACSA's Maintenance Department discovered an existing gravity main and manhole along an intermittent stream that drains into Biscuit Run had been exposed due to runoff. This project will replace the sewer segment that crosses the stream with ductile iron pipe and will reinforce the stream bank where the sewer manhole is exposed.

10/10/2023: Advertisement for construction was published on October 2, 2023, and the Pre-Bid Meeting will be held on October 11, 2023. Bid Opening is currently scheduled for November 2, 2023.

18. FY 2024 Miscellaneous Sewer Rehabilitation (Account Code 1908):

Consultant: OBG, A Ramboll Company (Ramboll)

Project Status: Construction
Percent Complete: Underway

Contractor: Prism Contractors & Engineers, Inc. (Prism)

Construction Start: June 2023
Completion: June 2024
Total Budget: \$500,000
Appropriated Funds: \$500,000

Project Description: This project continues our annual "find and fix" program of sanitary sewer rehabilitation to reduce I&I in our system.

10/10/2023: Prism has completed the CCTV inspections associated with Work Order No.'s 1 and 2. ACSA staff is in the process of creating Work Order No. 4 which will cover the relining of approximately 1,900 linear feet of 10-inch clay sanitary sewer near Piedmont Virginia Community College.

Non-Utility and Facility CIP Projects

19. Risk Assessment Improvements (Account Code 1621):

Consultant: Dewberry Engineers, Inc. (Dewberry)

Project Status: Construction

Percent Complete: 95%

Contractor: Harrisonburg Construction Co., Inc. (HCC)

Construction Start: November 2022
Completion: November 2023
Total Budget: \$1,221,950
Appropriated Funds: \$1,222,048

Project Description: This project focuses on implementation of recommendations from our Vulnerability Assessment that was completed in conjunction with our community partners, which identified mitigation measures to lower risks and increase resiliency for the ACSA. Priority 1 improvements focus on fencing and door hardening at existing tank and pump station sites. Priority 2 focuses on the creation of sterile zones around various sites. Priorities 3 and 4 focus on installation of new fencing and lightening protection. Some mitigation measures have already been completed with others phased over upcoming fiscal years based upon priority.

10/10/2023: HCC anticipates beginning door installations within the next two weeks. ACSA Maintenance Crews have established sterile zones around the following sites: Ednam Forest and Ashcroft Upper Tanks, Mill Creek Water Pump Station, North Fork Regional Sewer Pump Station, and Camelot Sewer Pump Station. Future sites for sterile zone creation include Mosby Mountain Pump Station and the ACSA Spotnap Facility.

20. ESRI ArcGIS Utility Network Implementation Study (Account Code 1628):

Consultant: Timmons Group

Project Status: Study
Percent Complete: 10%

Project Start: September 2023
Completion: March 2024
Total Budget: \$225,000
Appropriated Funds: \$45,228

Project Description: The software vendor for the ACSA's Geographic Information System (GIS) has released a product called Utility Network which

could enable additional functionality that would benefit ACSA staff. Implementing this software would entail a major change to the structure of the GIS as well as how it is accessed, maintained, modified, and updated going forward. It also would impact all integrated software. This study will determine if a migration is possible due to the various integrations and processes currently in place. The study will weigh the benefits with the consequences of implementing the software. It will also determine what changes would be necessary to the GIS before the data is in a format which can be migrated into the Utility Network.

10/10/2023: The Discovery Sessions are well underway with four out of five completed. ACSA staff will be reviewing a Data Reviewer draft shortly. Timmons Group is reviewing compatibility of existing software systems.

21. Energy Audit (Account Code 1625):

Consultant: OBG, A Ramboll Company (Ramboll)

Project Status: Construction

Percent Complete: 0%

Contractor: ACSA Facilities Group

Construction Start: July 2023
Completion: October 2023
Total Budget: \$390,000
Appropriated Funds: \$296,000

Project Description: This project consists of a comprehensive energy audit of the Operations Center and all pump stations. The Energy Audit evaluated current energy consumption and the factors that drove it, as well as analysis of our utility rate structures to identify potential cost savings. Surveys were conducted of all systems, including operation and maintenance procedures to determine where energy conservation could be improved. Recommendations from the Energy Audit included: LED Lighting Retrofit, Occupancy Based HVAC Controls, replacement of Domestic Water Heater, improved efficiencies of water and wastewater pumps, pursuit of Electric Fleet Vehicles (EV) and exploration of Solar Photovoltaic renewable energy.

10/10/2023: The replacement domestic water heater at the Spotnap Facility has arrived and installation is anticipated before the end of October 2023.

22. Avon Operations Center (Account Code 1622):

Consultant: Dewberry Engineers, Inc. (Dewberry)

Project Status: Design Percent Complete: 95%

Contractor: Undetermined

Construction Start: 2024 Completion: 2025

Total Budget: \$11,990,000 Appropriated Funds: \$933,857

Project Description: As part of the Operations Center Expansion Study our consultant reviewed all properties owned by the ACSA that could be utilized as we

continue to grow. 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 Operations Center is becoming overcrowded with equipment and materials, causing us to locate some equipment and larger materials in the former ACSA Maintenance Yard at the Crozet Water Treatment Plant, which we lease from RWSA. The future expansion of granular activated carbon (GAC) at the Crozet Water Treatment Plant site will result in the loss of much of the ACSA's storage space at that site. This project will begin to develop the Avon Street property into a much larger vehicle and materials storage facility, including a training area for our equipment operators.

10/10/2023: Dewberry is working with VDOT and County staff to address the last few minor comments before signature sets are submitted to the County for Site Plan approval.

23. ACSA – Fire Suppression System Replacement (Account Code 1631):

Consultant: Undetermined

Project Status: Study
Percent Complete: 0%
Construction Start: 2024
Completion: 2024
Total Budget: \$750,000

Appropriated Funds: \$0

Project Description: This project replaces the existing fire suppression system in both the Administration and Maintenance buildings here at our Operations Center. During a recent inspection, it was noted that the piping is beyond its useful life and a complete replacement was recommended. The ACSA anticipates utilizing a Design/Build Contract to perform this work.

10/10/2023: Two contractors submitted responses to the Design/Build Services Prequalification Request for Qualifications (RFQ). Following an evaluation process performed by ACSA staff, both contractors have been deemed qualified and the Request for Proposal will be issued later this week.

24. Records Management Project (Account Code 1632):

Consultant: Right Fit Consulting

Project Status: Study
Percent Complete: 0%

Study Start: September 2023 Completion: December 2023

Total Budget: \$325,000 Appropriated Funds: \$10,800

Project Description: The goal of this project is to improve record compliance and retention while digitizing paper files currently in storage. The initial phase of the Records Management Project consists of the classification of each document, so they are properly and securely stored and maintained. Ultimately files across the

organization will be scanned and searchable digital files created, allowing physical space to be freed up.

10/10/2023: The Data Inventory and Classification Kick-off Meeting is scheduled for October 13, 2023.

25. Four-Story Backflow Prevention Assembly Retrofit (Account Code 1765):

Consultant: ACSA/Dewberry Engineers, Inc. (Dewberry)

Project Status: Construction

Percent Complete: 98%

Contractor: Foothill Irrigation
Construction Start: February 2023
Completion: November 2023

Total Budget: \$348,000 Appropriated Funds: \$360,295

Project Description: In late 2018 ACSA staff became aware of four-story residential structures being constructed without proper backflow prevention assemblies. Section 8 of the ACSA Rules and Regulations details the ACSA Backflow Prevention Program. This program is in accordance with 12VAC5-590-570 through 12VAC5-590-630 of the Virginia Waterworks Regulations. The Containment Policy in 12VAC5-590-610 outlines the requirement for a backflow prevention (BFP) assembly on the domestic water service line to high rise structures, defined as four (4) or more stories.

10/10/2023: Foothill Irrigation recently completed four backflow assembly installations. There are currently 2 assemblies remaining to be installed.

26. SCADA System Phase 3 (Account Code 1605):

Consultant: Whitman, Requardt & Associates, Inc. (WRA)

Project Status: Construction

Percent Complete: 50%

Contractor: M.C. Dean
Construction Start: November 2022
Completion: December 2023

Total Budget: \$943,115 Appropriated Funds: \$1,224,918

Project Description: The ACSA Utility System has over 40 critical assets that include water and wastewater pump stations, water storage tanks and master PRV stations. They are considered critical because malfunctions or failures at any of the assets could have a drastic effect on our utility system and our customers. These assets are currently monitored by site visits of assigned Maintenance personnel. Phase 3 will expand the existing Supervisory Control and Data Acquisition (SCADA) System to serve the final seven master PRV stations and one water booster station that will allow ACSA employees to remotely monitor the operations of these critical assets from the main office building. Using alarms, we will be able to evaluate problems and prevent some failures before they happen more quickly.

10/10/2023: M.C. Dean has completed the piping work at all PRV's except for Glenmore, which is anticipated the week of October 16, 2023. ACSA staff witnessed factory acceptance testing on two of the control panels.



JML/jl 060806CIPMonthly10192023

Albemarle County Service Authority (ACSA) Active Private Development Projects October 2023

- Albemarle Business Campus Block 1 (Scottsville): Water and sewer main extensions to serve 128 multi-family units. The site is located to the northeast of the Old Lynchburg Road and Country Green Road intersection.
- 2. <u>Brookhill Blocks 16 & 17 (Rivanna)</u>: Water and sewer main extensions to serve 135 single family homes in the Brookhill subdivision, located north of Polo Grounds Road and east of the Montgomery Ridge Subdivision.
- Dunlora Park Phase 2 (Rio): Water and sewer main extensions to serve 6 single family homes in Dunlora Park, located at the intersection of Rio Road East and Dunlora Drive.
- **4.** HTC Area C Townhomes Block III (Rio): Sewer extension and water services to serve 10 attached single family units. The site is located near the intersection of Timberwood Boulevard and Lockwood Drive.
- 5. Lochlyn Hill Phase 4 (Rio): Water and sewer main extensions, and demolition of 14 existing homes for 14 single family detached units and 8 single family attached units. This project is located along Pen Park Lane, north of the City limits.
- **6.** Mountain View Elementary Building Addition (Scottsville): Water main extension to facilitate building addition.
- 7. North Pointe Apartments (Rivanna): Water main extension and a sewer connection to serve 279 multifamily units and a clubhouse. The project is located at the intersection of Northside Drive and Cliffstone Boulevard.
- **8.** North Pointe Section 2 (Rivanna): Water and sewer main extensions to serve 162 single family homes. The project is located at the northern end of Cliffstone Boulevard.
- 9. <u>Pleasant Green Phase 2B and 3 (White Hall)</u>: Water and sewer main extensions to serve 173 residential units. This project is located to the southeast of the Orchard Acres subdivision.
- **10.** Regents School of Charlottesville (Samuel Miller): Water and sewer main extensions to serve a private school, grades K-12. The site is located west of Trinity Presbyterian Church, along Reservoir Road.

- **11.** Rivanna Village Phase 2 (Scottsville): Water and sewer main extensions to serve 178 residential units. This project is located east of the Glenmore Ground Storage Tank and Rivanna Village Phase 1.
- **12.** <u>Scottsville Tiger Fuel (Scottsville)</u>: Water service and sewer main extension to serve a gas station. This project is located to the south of the Scottsville Road and James River Road intersection.
- 13. Southwood Phase 1 Blocks 9-11 (Scottsville): Water and sewer main extensions to serve 70 single family units and 16 condominium units. This project is located west of Horizon Road and south of Hickory Street.
- **14.** Southwood Redevelopment Village 2 (Scottsville): Water and sewer main extensions to serve 44 single family units and 4 condominium units. This project is located near the southern terminus of Horizon Road, on the south side of Hickory Street.
- **15.** Stonefield Block D1 (Jack Jouett): Water main extension to serve a 220 unit apartment building at the intersection of Inglewood Drive and Bond Street.
- **16.** <u>Victorian Heights (Rio)</u>: Water and sewer main extensions to serve 34 attached single family and 54 multi-family units. The site is located to the south of RWSA's Woodburn Road Water Tank, between Woodburn Road and Berkmar Drive.

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: FY 2024 CIP Authorizations STAFF CONTACT(S)/PREPARER: Jeremy M. Lynn, P.E., Director of Engineering	AGENDA DATE: October 19, 2023 ACTION: INFORMATION: CONSENT AGENDA: ACTION: INFORMATION: ATTACHMENTS: YES
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BACKGROUND: Authorization for two CIP Projects, both of which are included in the CIP Rate Model Budget. The first authorization is for the award and funding of construction for the Crozet Phase 4 Water Main Replacement Project. The second authorization is for funding to cover additional design phase services, additional geotechnical restoration efforts, and preparation of additional easement plats for the Scottsville Phase 4 Water Main Replacement Project.

DISCUSSION:

- Continues the ACSA's systematic program to replace aging and undersized asbestos-cement and PVC water mains.
- Provides ACSA staff with the professional expertise of our term contract consultant during design phase of the Scottsville Phase 4 Water Main Replacement Project.

BUDGET IMPACT: The bid price for the Crozet Phase 4 Water Main Replacement Project is approximately \$475,000 more than anticipated in the Rate Model. However, since our current Rate Model has construction funds spread over FY 2023-FY 2025, the additional funds will be incorporated into the FY 2025 CIP Budget. The additional design funds for the Scottsville Phase 4 Water Main Replacement Project are approximately \$60,000 more than anticipated in the Rate Model, however this should be offset by cost savings on other CIP projects.

RECOMMENDATIONS: Authorize funding for these projects to keep our CIP Project Schedule moving forward and improving our utility system.

BOARD ACTION REQUESTED: Approve the Consent Agenda.

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

ATTACHMENTS:

- Detailed memo of the proposed CIP authorizations.
- * Recommendation of Award and Bid Tabulation prepared by Michael Baker International, Inc. for the Crozet Phase 4 Water Main Replacement Project.
- Design Phase Services Amendment 3, prepared by Whitman, Requardt & Associates, LLP for the Scottsville Phase 4 Water Main Replacement Project.



MEMORANDUM

To: Board of Directors

From: Jeremy M. Lynn, P.E., Director of Engineering

Date: October 19, 2023

Re: FY 2024 CIP Authorizations

cc: Michael E. Derdeyn

The following projects require Board authorization:

A. <u>Crozet Phase 4 Water Main Replacement Project:</u> On September 6, 2023, the ACSA accepted bids for the Crozet Phase 4 Water Main Replacement Project. Three (3) contractors submitted bids on the project and the apparent low bidder was Valley Contracting, LLC with a corrected bid of \$6,476,268. The Engineer's Estimate was \$9,532,794.20. Attached is a letter, dated October 3, 2023, from Michael Baker International, Inc. (Baker) recommending award of the contract to Valley Contracting, LLC for their bid of \$6,476,268. The ACSA staff concurs with Baker's recommendation.

Board Action

We request the Board of Directors appropriate \$6,476,268 from the FY 2024 3R Fund for construction of the Crozet Phase 4 Water Main Replacement Project.

B. Scottsville Phase 4 Water Main Replacement Project: During the 90% Design Phase of the Scottsville Phase 4 Water Main Replacement Project, ACSA staff was made aware of more stringent pavement restoration requirements by the Virginia Department of Transportation (VDOT), as it relates to the geotechnical borings and test holes for the project. The need for additional geotechnical borings was also identified, as well as the need for six (6) additional easement plats. Attached is a proposal from Whitman, Requardt & Associated, LLP (WRA), dated September 16, 2023, for the cost of these additional design phase services. The estimated cost for these additional design phase services is \$69,830. The ACSA staff has reviewed this proposal and finds it satisfactory.

Board Action

We request the Board of Directors appropriate \$69,830 from the FY 2024 3R Fund for additional design phase services for the Scottsville Phase 4 Water Main Replacement Project.

JML/jml Attachments 010101CIPAuthorizations10192023





October 3, 2023

Mr. Jeremy M. Lynn, PE Albemarle County Service Authority 168 Spotnap Road Charlottesville, VA 22911 <u>Transmitted electronically to:</u> jlynn@serviceauthority.org

RE: Recommendation to Award

Crozet Phase 4 Water Main Replacement Project ACSA Project No. 2019-02

Dear Mr. Lynn:

Michael Baker International, Inc. (Michael Baker) has completed its evaluation of three (3) bids, which were opened on September 6, 2023, for the Crozet Phase 4 Water Main Replacement Project. The following table reflects the order of the verified bid totals.

<u>Bidde</u>	r Bid Total (Percent of Eng	gineer's Opinion)
1.	Valley Contracting, LLC\$ 6,476,268.00 (Corrected)	(67.9%)
2.	Commonwealth Excavating, Inc \$ 7,038,743.00 (As Submitted)	(73.8%)
3.	Caton Construction Group, Inc \$ 89,195,183,899.33 (Corrected)	(935,666.7%)
	Engineer's Opinion of Probable Construction Cost	2,794.20

All bid packages submitted to the Albemarle County Service Authority for the aforementioned project have been reviewed by Michael Baker for discrepancies in unit prices, and mathematical errors in the extended Item totals and base bid amounts, as shown in the attached Bid Tabulation. Noted discrepancies are identified and resolved thereon, with corrected totals being shown above. Upon completion of bid resolutions, and based on the information presented in its bid package, Valley Contracting, LLC (d.b.a. Valley Earth and Pipe, LLC), located in Churchville, Virginia, has been confirmed as the low bidder.

Valley Contracting, LLC's bid package appears to conform to the requirements set forth in the Instruction to Bidders and General Terms contained on page IB-4 of the Project Manual, pending final concurrence by the Albemarle County Service Authority. Michael Baker verified Valley Contracting, LLC currently holds a valid Virginia Class "A" Heavy/Highway (H/H) Contractor's license, number 2705175555, which expires May 31, 2024. This Contractor will be required to maintain a valid Virginia Class "A" Contractors license throughout the duration of the project, if awarded.



Mr. Jeremy M. Lynn, PE October 3, 2023 Page 2 of 2

Based on the information provided and verifications performed through various available project references, and favorable responses received, this bidder's project and personnel experience appears to meet the intent of the qualifications, and presents adequate experience of similar size and type to perform the work set forth in the Contract Documents.

As a result of our completed evaluations, Valley Contracting, LLC (d.b.a. Valley Earth and Pipe, LLC) has been determined to be the lowest responsive and responsible bidder in accordance with the Virginia Public Procurement Act. Therefore, Michael Baker recommends the Albemarle County Service Authority proceed with awarding a construction contract for the Crozet Phase 4 Water Main Replacement Project to Valley Contracting, LLC of Churchville, Virginia in the corrected amount of \$6,476,268.00 (six million four hundred seventy six thousand two hundred sixty eight dollars and no cents). This Recommendation to Award consists of four (4) pages, including all enclosures.

Should you have any questions regarding this recommendation or require additional information, please do not hesitate to contact me at (757) 631-5451 or warren.wilczynski@mbakerintl.com.

Sincerely,

MICHAEL BAKER INTERNATIONAL, INC.

Warren Wilczynski, EN

Senior Associate | Technical Specialist

Enclosures: Bid Tabulation Summary, 1 page

Bid Statistics Summary, 1 page

cc: Justin S. Weiler, PE (ACSA)

Gary L. Heisler, PE (Michael Baker)

Project File 194392

CROZET PHASE 4 WATER MAIN REPLACEMENT (2019-02) Albemarle County Service Authority • Albemarle County, Virginia

BID TABULATION

Bid Opening: September 6, 2023 at 2:00 pm (EST) • Bid Tab: Prepared September 6, 2023 Michael Baker International, Inc. 272 Bendix Road, Suite 400 • Virginia Beach, Virginia 23452

	DESCRIPTION			Engineer's Probable Con	Opinion of struction Cost		racting, LLC Earth and Pipe)	Commonwealth	Excavating, Inc.	Caton Construc	ion Group, Inc.
Item No.	Bid Item	Quantity	Unit	Unit Cost	Calculated Total Cost	Unit Cost	Calculated Total Cost	Unit Cost	Calculated Total Cost	Unit Cost	Calculated Total Cost
1	Mobilization (not to exceed 3% of construction cost subtotal)	1	LS	\$ 277,650.00	\$ 277,650.00	\$ 150,000.00	\$ 150,000.00	\$ 205,011.00	\$ 205,011.00	\$ 330,745.12	\$ 330,745.12
2	12-Inch Zinc-Coated Ductile Iron (DIP) Water Main Installation	3,618	LF	\$ 425.00	\$ 1,537,650.00	\$ 288.00	\$ 1,041,984.00	\$ 297.00	\$ 1,074,546.00	\$ 1,772,856.18	\$ 6,414,193,659.24
3	8-Inch Zinc-Coated Ductile Iron (DIP) Water Main Installation	13,369	LF	\$ 310.00	\$ 4,144,390.00	\$ 166.00	\$ 2,219,254.00	\$ 244.00	\$ 3,262,036.00	\$ 5,558,830.20	\$ 74,316,000,943.80
4	6-Inch Zinc-Coated Ductile Iron (DIP) Water Main Installation (shall include all piping lengths associated with Item No. 12, Fire Hydrant Installation)	1,539	LF	\$ 300.00	\$ 461,700.00	\$ 148.00	\$ 227,772.00	\$ 209.00	\$ 321,651.00	\$ 446,156.01	\$ 686,634,099.39
5	4-Inch Zinc-Coated Ductile Iron (DIP) Water Main Installation	938	LF	\$ 250.00	\$ 234,500.00	\$ 166.00	\$ 155,708.00	\$ 198.00	\$ 185,724.00	\$ 332,990.00	\$ 312,344,620.00
6	12-Inch Gate Valve Installation	15	EA	\$ 9,500.00	\$ 142,500.00	\$ 7,500.00	\$ 112,500.00	\$ 5,100.00	\$ 76,500.00	\$ 132,414.03	\$ 1,986,210.45
7	8-Inch Gate Valve Installation	33	EA	\$ 7,500.00	\$ 247,500.00	\$ 5,000.00	\$ 165,000.00	\$ 2,700.00	\$ 89,100.00	\$ 165,370.92	\$ 5,457,240.36
8	6-Inch Gate Valve Installation (shall include all gate valves associated with Item No. 12, Fire Hydrant Installation)	36	EA	\$ 5,000.00	\$ 180,000.00	\$ 4,500.00	\$ 162,000.00	\$ 2,400.00	\$ 86,400.00	\$ 129,765.96	\$ 4,671,574.56
9	4-Inch Gate Valve Installation	8	EA	\$ 4,500.00	\$ 36,000.00	\$ 4,000.00	\$ 32,000.00	\$ 2,200.00	\$ 17,600.00	\$ 24,380.48	\$ 195,043.84
10	Fire Hydrant Installation	31	EA	\$ 12,000.00	\$ 372,000.00	\$ 5,000.00	\$ 155,000.00	\$ 5,600.00	\$ 173,600.00	\$ 323,697.35	\$ 10,034,617.85
11	1-Inch Air Release Assembly	5	EA	\$ 5,500.00	\$ 27,500.00	\$ 3,000.00	\$ 15,000.00	\$ 2,900.00	\$ 14,500.00	\$ 18,743.15	\$ 93,715.75
12	2-Inch Air Release Assembly	1	EA	\$ 6,000.00	\$ 6,000.00	\$ 4,000.00	\$ 4,000.00	\$ 4,200.00	\$ 4,200.00	\$ 8,207.01	\$ 8,207.01
13	2-Inch Blow-off Assembly (Dead-End, Type "A")	5	EA	\$ 8,500.00	\$ 42,500.00	\$ 4,000.00	\$ 20,000.00	\$ 2,100.00	\$ 10,500.00	\$ 8,375.45	\$ 41,877.25
14	Water Meter Vault and Hauler Hydrant	1	EA	\$ 16,500.00	\$ 16,500.00	\$ 42,000.00	\$ 42,000.00	\$ 37,950.00	\$ 37,950.00	\$ 67,480.25	\$ 67,480.25
15	1-Inch Water Service Connection	93	EA	\$ 2,500.00	\$ 232,500.00	\$ 1,000.00	\$ 93,000.00	\$ 560.00	\$ 52,080.00	\$ 49,582.02	\$ 4,611,127.86
16	1-Inch Copper Water Tubing (Bored)	1,020	LF	\$ 125.00	\$ 127,500.00	\$ 100.00	\$ 102,000.00	\$ 199.00	\$ 202,980.00	\$ 56,977.02	\$ 58,116,560.40
17	1-Inch Copper Water Tubing (Open Cut)	1,610	LF	\$ 90.00	\$ 144,900.00	\$ 50.00	\$ 80,500.00	\$ 179.00	\$ 288,190.00	\$ 92,719.09	\$ 149,277,734.90
18	5/8-Inch Water Meter in Standard Plastic Meter Box Installation	84	EA	\$ 900.00	\$ 75,600.00	\$ 1,000.00	\$ 84,000.00	\$ 1,800.00	\$ 151,200.00	\$ 109,494.84	\$ 9,197,566.56
19	5/8-Inch Water Meter in Special Traffic Rated Meter Box Installation	6	EA	\$ 1,100.00	\$ 6,600.00	\$ 2,000.00	\$ 12,000.00	\$ 2,100.00	\$ 12,600.00	\$ 15,674.64	\$ 94,047.84
20	1-Inch Water Meter in Standard Plastic Meter Box Installation	3	EA	\$ 1,100.00	\$ 3,300.00	\$ 1,600.00	\$ 4,800.00	\$ 2,300.00	\$ 6,900.00	\$ 5,486.43	\$ 16,459.29
21	Concrete Water Meter Vault and 3-Inch Water Meter Installation	2	EA	\$ 12,500.00	\$ 25,000.00	\$ 46,000.00	\$ 92,000.00	\$ 39,000.00	\$ 78,000.00	\$ 134,960.05	\$ 269,920.10
22	Sanitary Manhole Frame and Cover Replacement (as authorized by ACSA)	11	EA	\$ 2,000.00	\$ 22,000.00	\$ 2,500.00	\$ 27,500.00	\$ 1,200.00	\$ 13,200.00	\$ 14,905.44	\$ 163,959.84
23	Asphalt Concrete Pavement Surface Restoration, Full-Width Mill Only (VDOT Primary Roads - Rockfish Gap Turnpike and Crozet Avenue)	12,675	SY	\$ 15.00	\$ 190,125.00	\$ 20.00	\$ 253,500.00	\$ 7.00	\$ 88,725.00	\$ 64,008.75	\$ 811,310,906.25
24	Asphalt Concrete Pavement Surface Restoration, 2-Inch Overlay Only (VDOT Primary Roads - Rockfish Gap Turnpike and Crozet Avenue)	12,675	SY	\$ 25.00	\$ 316,875.00	\$ 35.00	\$ 443,625.00	\$ 18.00	\$ 228,150.00	\$ 228,150.00	\$ 2,891,801,250.00
25	Asphalt Concrete Pavement Surface Restoration, Edge Mill and 1-1/2 Inch Overlay (VDOT Secondary Roads and Private Streets)	15,525	SY	\$ 20.00	\$ 310,500.00	\$ 35.00	\$ 543,375.00	\$ 14.00	\$ 217,350.00	\$ 217,660.05	\$ 3,379,172,276.25
26	Asphalt Driveway Restoration	575	SY	\$ 35.00	\$ 20,125.00	\$ 50.00	\$ 28,750.00	\$ 29.00	\$ 16,675.00	\$ 14,829.25	\$ 8,526,818.75
27	Aggregate Surfaces (including Gravel Driveway Restoration)	25	CY	\$ 75.00	\$ 1,875.00	\$ 100.00	\$ 2,500.00	\$ 35.00	\$ 875.00	\$ 6,873.75	\$ 171,843.75
28	Class I Rip Rap	120	CY	\$ 425.00	\$ 51,000.00	\$ 100.00	\$ 12,000.00	\$ 75.00	\$ 9,000.00	\$ 38,182.08	\$ 4,581,849.60
29	Additional Excavation	1,000	CY	\$ 45.00	\$ 45,000.00	\$ 25.00	\$ 25,000.00	\$ 1.00	\$ 1,000.00	\$ 37,160.00	\$ 37,160,000.00
30	Additional Class "D" Concrete	100	CY	\$ 500.00	\$ 50,000.00	\$ 250.00	\$ 25,000.00	\$ 350.00	\$ 35,000.00	\$ 56,304.00	\$ 5,630,400.00
31	Additional Select Fill Type A (Suitable Earth)	250	CY	\$ 65.00	\$ 16,250.00	\$ 50.00	\$ 12,500.00	\$ 3.00	\$ 750.00	\$ 16,245.00	\$ 4,061,250.00
32	Additional Select Fill Type B (Crushed Stone)	750	CY	\$ 75.00	\$ 56,250.00	\$ 72.00	\$ 54,000.00	\$ 35.00	\$ 26,250.00	\$ 103,552.05	\$ 77,664,037.50
33	Utility Test Holes (as authorized by ACSA)	20	EA	\$ 1,800.00	\$ 36,000.00	\$ 1,500.00	\$ 30,000.00	\$ 475.00	\$ 9,500.00	\$ 44,967.04	\$ 899,340.80
34	Abandonment of Existing Water Mains and Appurtenances	1	LS	\$ 75,000.00	\$ 75,000.00	\$ 48,000.00	\$ 48,000.00	\$ 41,000.00	\$ 41,000.00	\$ 396,514.77	\$ 396,514.77
				Calculated Total	\$ 9,532,794.20	Calculated Total	\$ 6,476,268.00	Calculated Total	\$ 7,038,743.00	Calculated Total	\$ 89,195,183,899.33
				-	Opinion of struction Cost	Base Bid	\$ 6,475,268.00	Base Bid	\$ 7,038,743.00	Base Bid	\$ 11,024,262.25

Base Bid \$ 6,475,268.00	Base Bid \$ 7,036,743.00	Base Bid \$ 11,024,262.25
Mobilization conforms to NTE Value	Mobilization conforms to NTE Value	Mobilization conforms to NTE Value
ERROR IN BID TOTALS	Bid Totals VERIFIED	ERROR IN BID TOTALS
\$ 1,000.00	\$ 0.00	\$ 89,184,159,637.08
Computed Total Price shown for Contract Item No. 5 was \$8 less than the calculated value.		For all Contract Items (except #s 1, 13 and 34), the unit price in words does not match the unit price in numbers and/or the computed total price.
Computed Total Amount shown for All Contract Items was \$992 less than the calculated value.	No comments on this bid.	When there is a discrepancy between the unit price in words versus the unit price in numbers, the unit price in words governs.
This accounts for the \$1,000 error. This Bid has been resolved to \$6,476,268.00, and remains as the low bid.		Resolution of this bid was not performed due the excessive errors, as resolution would not alter the Bidder Ranking.
Valley Contracting, LLC (d.b.a. Valley Earth and Pipe)	Commonwealth Excavating, Inc.	Caton Construction Group, Inc.

CROZET PHASE 4 WATER MAIN REPLACEMENT (2019-02)

Albemarle County Service Authority • Albemarle County, Virginia

BID STATISTICS

Bid Opening: September 6, 2023 at 2:00 pm (EST) • Bid Tab: Prepared September 6, 2023

Michael Baker International, Inc.

272 Bendix Road, Suite 400 • Virginia Beach, Virginia 23452

	Unit Cost	Min	Max	Average	Mode
Mobilization (not to exceed 3% of construction cost subtotal)	\$ 277,650.00	\$ 150,000.00	\$ 205,011.00	\$ 177,505.50	#N/A
12-Inch Zinc-Coated Ductile Iron (DIP) Water Main Installation	\$ 425.00	\$ 288.00	\$ 297.00	\$ 292.50	#N/A
8-Inch Zinc-Coated Ductile Iron (DIP) Water Main Installation	\$ 310.00	\$ 166.00	\$ 244.00	\$ 205.00	#N/A
6-Inch Zinc-Coated Ductile Iron (DIP) Water Main Installation (shall include all piping lengths associated with Item No. 12, Fire Hydrant Installation)	\$ 300.00	\$ 148.00	\$ 209.00	\$ 178.50	#N/A
4-Inch Zinc-Coated Ductile Iron (DIP) Water Main Installation	\$ 250.00	\$ 166.00	\$ 198.00	\$ 182.00	#N/A
12-Inch Gate Valve Installation	\$ 9,500.00	\$ 5,100.00	\$ 7,500.00	\$ 6,300.00	#N/A
8-Inch Gate Valve Installation	\$ 7,500.00	\$ 2,700.00	\$ 5,000.00	\$ 3,850.00	#N/A
6-Inch Gate Valve Installation (shall include all gate valves associated with Item No. 12, Fire Hydrant Installation)	\$ 5,000.00	\$ 2,400.00	\$ 4,500.00	\$ 3,450.00	#N/A
4-Inch Gate Valve Installation	\$ 4,500.00	\$ 2,200.00	\$ 4,000.00	\$ 3,100.00	#N/A
Fire Hydrant Installation	\$ 12,000.00	\$ 5,000.00	\$ 5,600.00	\$ 5,300.00	#N/A
1-Inch Air Release Assembly	\$ 5,500.00	\$ 2,900.00	\$ 3,000.00	\$ 2,950.00	#N/A
2-Inch Air Release Assembly	\$ 6,000.00	\$ 4,000.00	\$ 4,200.00	\$ 4,100.00	#N/A
2-Inch Blow-off Assembly (Dead-End, Type "A")	\$ 8,500.00	\$ 2,100.00	\$ 4,000.00	\$ 3,050.00	#N/A
Water Meter Vault and Hauler Hydrant	\$ 16,500.00	\$ 37,950.00	\$ 42,000.00	\$ 39,975.00	#N/A
1-Inch Water Service Connection	\$ 2,500.00	\$ 560.00	\$ 1,000.00	\$ 780.00	#N/A
1-Inch Copper Water Tubing (Bored)	\$ 125.00	\$ 100.00	\$ 199.00	\$ 149.50	#N/A
1-Inch Copper Water Tubing (Open Cut)	\$ 90.00	\$ 50.00	\$ 179.00	\$ 114.50	#N/A
5/8-Inch Water Meter in Standard Plastic Meter Box Installation	\$ 900.00	\$ 1,000.00	\$ 1,800.00	\$ 1,400.00	#N/A
5/8-Inch Water Meter in Special Traffic Rated Meter Box Installation	\$ 1,100.00	\$ 2,000.00	\$ 2,100.00	\$ 2,050.00	#N/A
1-Inch Water Meter in Standard Plastic Meter Box Installation	\$ 1,100.00	\$ 1,600.00	\$ 2,300.00	\$ 1,950.00	#N/A
Concrete Water Meter Vault and 3-Inch Water Meter Installation	\$ 12,500.00	\$ 39,000.00	\$ 46,000.00	\$ 42,500.00	#N/A
Sanitary Manhole Frame and Cover Replacement (as authorized by ACSA)	\$ 2,000.00	\$ 1,200.00	\$ 2,500.00	\$ 1,850.00	#N/A
Asphalt Concrete Pavement Surface Restoration, Full-Width Mill Only (VDOT Primary Roads - Rockfish Gap Turnpike and Crozet Avenue)	\$ 15.00	\$ 7.00	\$ 20.00	\$ 13.50	#N/A
Asphalt Concrete Pavement Surface Restoration, 2-Inch Overlay Only (VDOT Primary Roads - Rockfish Gap Turnpike and Crozet Avenue)	\$ 25.00	\$ 18.00	\$ 35.00	\$ 26.50	#N/A
Asphalt Concrete Pavement Surface Restoration, Edge Mill and 1-1/2 Inch Overlay (VDOT Secondary Roads and Private Streets)	\$ 20.00	\$ 14.00	\$ 35.00	\$ 24.50	#N/A
Asphalt Driveway Restoration	\$ 35.00	\$ 29.00	\$ 50.00	\$ 39.50	#N/A
Aggregate Surfaces (including Gravel Driveway Restoration)	\$ 75.00	\$ 35.00	\$ 100.00	\$ 67.50	#N/A
Class I Rip Rap	\$ 425.00	\$ 75.00	\$ 100.00	\$ 87.50	#N/A
Additional Excavation	\$ 45.00	\$ 1.00	\$ 25.00	\$ 13.00	#N/A
Additional Class "D" Concrete	\$ 500.00	\$ 250.00	\$ 350.00	\$ 300.00	#N/A
Additional Select Fill Type A (Suitable Earth)	\$ 65.00	\$ 3.00	\$ 50.00	\$ 26.50	#N/A
Additional Select Fill Type B (Crushed Stone)	\$ 75.00	\$ 35.00	\$ 72.00	\$ 53.50	#N/A
Utility Test Holes (as authorized by ACSA)	\$ 1,800.00	\$ 475.00	\$ 1,500.00	\$ 987.50	#N/A
Abandonment of Existing Water Mains and Appurtenances	\$ 75,000.00	\$ 41,000.00	\$ 48,000.00	\$ 44,500.00	#N/A

^{*} Due to siginificant error in the Caton Construction Group bid, its costs are not considered in this statistical evaluation



Whitman, Requardt & Associates, LLP

Engineers · Architects · Environmental Planners

Est. 1915

September 26, 2023

Mr. Alexander Morrison, P.E. Senior Civil Engineer Albemarle County Service Authority 168 Spotnap Road Charlottesville, Va. 22911

Re: Scottsville Phase 4 – Water Main Replacement Project – Design Phase Services Amendment 3

Dear Mr. Morrison:

Whitman Requardt and Associates (WRA) is pleased to provide this engineering services amendment to the Albemarle County Service Authority (ACSA) for the above-referenced project. This amendment summarizes the additions to the project scope to support the project's asbestos cement (AC) and cast iron (CI) water main replacement requirements as outlined in the original authorization (dated March 8, 2019) and Amendments 1 and 2, (dated May 4, 2020 and March 1, 2022).

The design amendment and fee estimate are based on the following, revised tasks and actions taken during the design phase of the project. The amendment fee estimate is included as Attachment A.

A. Project Management

For this amendment, WRA requests additional project management time be considered for the extended design phase of the project. The project management time is required due to the duration of the design phase as well as ongoing coordination required with RWSA, Lincoln Surveying (LS), Rice Associates (RA), VDOT, and the ACSA. Additional time may also be needed to support easement acquisitions undertaken by the ACSA. For this amendment, WRA proposes 2 hours/week for a duration of 3 months (estimated 12 weeks).

B. Additional Stakeout and Coordination for Geotechnical Borings

Under this task, LS was required to restake the geotechnical boring locations on two separate occasions. The restaking work was required due to delays in issuance of the VDOT Land Use Permit and revised boring locations as requested by RWSA. Previously staked locations were also removed prior to the completion of utility locating and designating for the required Miss Utility tickets. The fee for this task includes the required restaking by LS and file coordination work with LS.

C. Geotechnical Investigation and Restoration

The original authorization and Amendments 1 and 2 outlined the proposed geotechnical boring program along the water main alignments for the project. WRA has coordinated and conducted the boring program with Froehling & Robertson (F&R). As F&R worked to obtain the required Land Use Permit from VDOT, VDOT required that the boring locations within existing pavement be restored with a 3 ft. x 3 ft., full depth pavement patch. The required pavement restoration resulting in additional subcontract work that was provided by S.L. Williamson. These newly required restoration requirements were not accounted for or anticipated in the original authorization and earlier project amendments.

Page 2 September 26, 2023

The geotechnical boring program has been completed, including all required restoration efforts. The requested additional fee for this task only includes the difference between the original authorized subcontract amounts for the geotechnical boring program and the actual costs incurred by F&R to complete the program and all permit requirements. WRA's tasks and fees as outlined in the original authorization and Amendments 1 and 2 have been completed at the budgeted amounts. The additional fee for F&R to complete the geotechnical program and restoration work is summarized as follows:

- Original authorization \$7,000
- Amendment 1 \$4,500
- Amendment 2 \$28,736,32
- Actual Fee from F&R (previously invoiced to the ACSA) = \$65,720.30
- Requested Additional Subconsultant Fee = \$25,483.98

D. Easement Plats

The original authorization and Amendments 1 and 2 included a total of twenty-four (24) easement plats. Based on the current design and required easement plat program, a total of thirty (30) easement plats have been developed for the project. An additional easement plat may be required based on the additional field mapping and design work outlined in Task E below. The fee for this task includes the preparation and revisions to seven additional plats, and the following:

- The cost per plat remains \$1,575 as previously provided in the original authorization and earlier amendments.
- The fees associated with easement plat development include electronic file transfer/coordination with LS and QA/QC review of all draft plats with the design plans and associated easement linework prior to transmittal to the ACSA and RWSA.
- The easement plats will be prepared by LS and provided to RWSA and the ACSA as needed.
- Costs for extensive revisions to easement plats required for the project are not included.

E. Water Main Designation and Additional Design Efforts

During the design work and plan reviews for the project, it was determined that an existing AC water main at the intersection of Warren Street and Valley Street was not located and mapped. The existing water main was not field designated during the base mapping work and follow up survey work for the project. Based on GIS information and correspondence with the ACSA, the existing water main appears to be located on a private property in the northwest corner of the Warren Street/Valley Street intersection. In addition, the existing water main appears to be located across an active drainage channel and upstream of a large box culvert at the Warren Street/Valley Street intersection. Attempts to locate and to map the existing main during the design phase have not been successful.

WRA is working with Rice Associates (RA) to complete the field designation for the remaining existing water main. RA is locating and mapping the existing water main with the work performed as part of the utility test hole activities. Based on the anticipated location of the remaining existing AC water main, modifications will be needed to the current 90% design plans to show the required water main replacement. Additional field survey and locating work by LS may also be required once the required modifications are reviewed and determined.

The additional fees for this task include estimated, additional field survey and mapping by LS and design plan modifications. WRA will continue to work with LS to coordinate any additional required field survey work once the existing water main location and mapping have been provided and reviewed. At this time, WRA estimates that mapping and design modifications to at least three current design plan sheets and

associated bid quantities will be required. WRA will advise the ACSA once all required design modifications have been confirmed.

F. Nationwide Permit

The current water main replacement alignments have previously been field reviewed to confirm impacts to wetlands, creek crossing, and jurisdictional waters. To date, no impacts have been identified that require additional permitting.

The anticipated additional design work associated with Task E above may involve crossing an existing active drainage channel that is likely jurisdictional. Once the required design revisions in Task E have been confirmed, the impacts to the jurisdictional drainage channel must be reviewed to confirm the need for a Joint Permit Application (JPA) and a Nationwide Permit through the Corps of Engineers (COE). WRA will notify the ACSA once this determination has been made.

The original authorization for the project included the development of a JPA and work to obtain a Nationwide Permit for the project. As a result, no additional fees are requested for this task under this amendment.

ASSUMPTIONS

In addition to the items noted above, the following assumptions have been made in the development of this amendment:

- 1. The costs to re-establish survey controls along the project corridors, if needed, are not included.
- 2. Additional project management time during easement negotiations and acquisitions is not included.
- 3. Traffic control or Maintenance of Traffic (MOT) Plans are not anticipated or proposed for design plan approval. Additional fees will apply if MOT plans are required for design plan approval.
- 4. Stormwater management BMPs including quantity or quality measures are not included or anticipated for design plan approval.
- 5. No additional fees for utility test holes are requested. The performed work has been completed within the authorized budget under the original authorization and Amendments 1 and 2.
- 6. Additional restoration work for geotechnical borings or test holes, if required, have not been included.
- 7. Design or operational modifications at RWSA's Scottsville Water Treatment Plant are not included.
- 8. Costs for extensive revisions to easement plats required for the project are not included.
- 9. Land acquisition services are not included.
- 10. Design modifications required as a result of easement negotiations are not included and considered additional work.
- 11. Bid phase and construction phase services are not included.

SCHEDULE

WRA will continue work on the additional tasks outlined in this amendment upon authorization. WRA will proceed with development of the final design documents and submittal to the ACSA following the receipt of the ACSA's 90% review comments and outstanding VDOT reviews and the completion of the tasks outlined in this amendment.

FEE ESTIMATE

It is important to note that the utility test hole work and associated restoration work have been completed within the previously authorized amounts.

Page 4 September 26, 2023

Based on the required work to complete the tasks above and the assumptions presented in this amendment, WRA estimates the total additional engineering fee to be \$69,830 as summarized in Attachment A. The fee estimate includes the current hourly rates previously provided to the ACSA.

WRA trusts that this amendment and fee estimate address the additional and all remaining project requirements. We look forward to continuing our work with you to complete a successful design phase for the project. Thank you for your continued cooperation on this project.

Very truly yours,

Whitman, Requardt & Associates, LLP

Charles Luck, P.E. Vice President

cc: File 46480-025

Attachment A

Fee Estimate

COST PER

Scottsville Phase 4 - Water Main Replacement Project - Design Phase Services Amendment 3 Albemarle County Service Authority

LABOR CLASSIFICATIONS (HOURS WITH HOURLY RATES)

TASK	Project Manager HRS @ \$85.00	Sr. Proj. Engineer HRS @ \$75.00	Design Engineer HRS @ \$60.00	Senior Designer HRS @ \$50.00	CADD Technician HRS @ \$46.00	TOTAL (HRS)	DIRECT EXPENSES (\$)	TASK (with 2.55 mult.) (\$)
Project Management - 2 hrs/week for 12 weeks	24.00					24.00	\$0.00	\$5,202.00
Additional Stakeout and Coordination for Geotechnical			C 00		0.00	44.00	Фо 440 00	ΦE 000 40
Borings (subconsultant = Lincoln Surveying) ¹			6.00		8.00	14.00	\$3,412.00	\$5,268.40
Geotechnical Investigation and Restoration (subconsultant						0.00	ФОБ 400 00	ФОГ 400 OO
service) ² - No Additional WRA Fees						0.00	\$25,483.98	\$25,483.98
Easement Plats (7 additional plats, subconsultant service) ³	4.00		6.00	8.00		18.00	\$11,025.00	\$13,830.00
Water Main Designation and Additional Design Efforts ⁴		8.00	15.00	20.00	10.00	53.00	\$10,000.00	\$17,548.00
Nationwide Permit - NO ADDITIONAL FEE REQUESTED								
SUB-TOTAL HOURS	28.00	8.00	27.00	28.00	18.00	71.00		
SUB-TOTAL DOLLARS (WITHOUT MULTIPLIER)	\$2,380.00	\$600.00	\$1,620.00	\$1,400.00	\$828.00	\$6,828.00	\$49,920.98	\$67,332.38
					TOTAL HOURS	71.00 \$6,828.00	 \$49,920.98	\$67,332.38

TOTAL HOURS	71.00
TOTAL DOLLARS	\$6,828.00
TOTAL DOLLARS WITH 2.55 MULTIPLIER	\$17,411.40
TOTAL EXPENSES (EXCLUDING SUBCONSULTANT SERVICES)	\$49,920.98
TOTAL MARKUP ON SUBCONSULTANT FEES (SEE FOOTNOTES BELOW)	\$2,496.05
TOTAL ESTIMATED FEE	\$69,828.43
TOTAL FEE (ROUNDED)	\$69,830.00

Footnotes:

^{1.} Direct expense is subconsultant cost. 5% markup included in fee total.

² Direct expense is subconsultant cost. 5% markup included in fee total.

^{3.} Easement Plat Price of \$1,575 each included in totals shown. 5% markup included in fee total.

^{4.} Direct expense is estimated subconsultant cost for additional field survey and mapping. 5% markup included in fee total.

AGENDA ITEM EXECUTIVE SUMMARY

CONSENT AGENDA

AGENDA TITLE: Sterile Zone Creation

and Maintenance

STAFF CONTACT(S)/PREPARER:

Roland Bega, Operations Supervisor and Alexander J. Morrison, P.E., Senior

Civil Engineer

AGENDA DATE: October 19, 2023

ACTION: None

ATTACHMENTS: Yes

BACKGROUND: As part of the ACSA's Risk Assessment, conducted using the Risk and Resilience Management of Water and Wastewater Systems (J100), approved by the Department of Homeland Security (DHS), Sterile Zone creation and maintenance was identified as an ongoing area of focus.

DISCUSSION: Sterile zones, also referred to as clear zones, buffer zones, and "no man" zones, assist in the detection of unauthorized access. These zones also help mitigate physical access by unauthorized persons. In general, these zones are located along the exterior perimeter of facility fencing, which provides a defined boundary for authorized access. Along the perimeter fenceline, a three (3) to five (5) foot wide area is kept clear of trees, shrubs, and other improvements. This area provides clear visibility along the unsecure area adjacent to the fenceline, which improves the ability to detect persons attempting unauthorized access. The improved visibility can be monitored by authorized personnel in person, or through security cameras that are monitored. In addition to the improved visibility, the zone can be easily traversed by authorized personnel to conduct inspections of perimeter fencing for maintenance purposes. The removal of trees, shrubs and other improvements also prevents using these items to assist with gaining unauthorized access by climbing the perimeter fence. The use of vertical slat anti-climb fences and tight mesh fences help prevent unauthorized persons from gaining a foothold to climb the perimeter fence. These zones prevent unauthorized persons from using a secondary fixed object to assist with climbing the perimeter fence. In areas where an object cannot be removed from these zones, anti-climb features are deployed on the permanent object, as shown in the attachments.

Based on the ACSA's Risk Assessment, ACSA maintenance personnel conducted work along perimeter fencing at multiple facilities to create these zones. Routine maintenance of these zones is used to ensure new growth does

AGENDA ITEM EXECUTIVE SUMMARY

CONSENT AGENDA

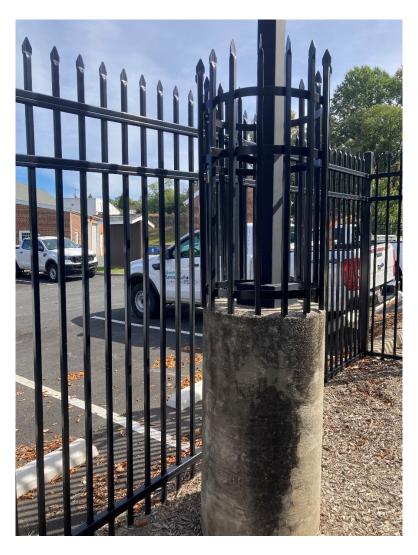
not occur within the zone while also promoting routine inspections of facility perimeter fencing. Examples of recently maintained sterile zones can be seen in the attachments as well as an example of crews creating a sterile zone.

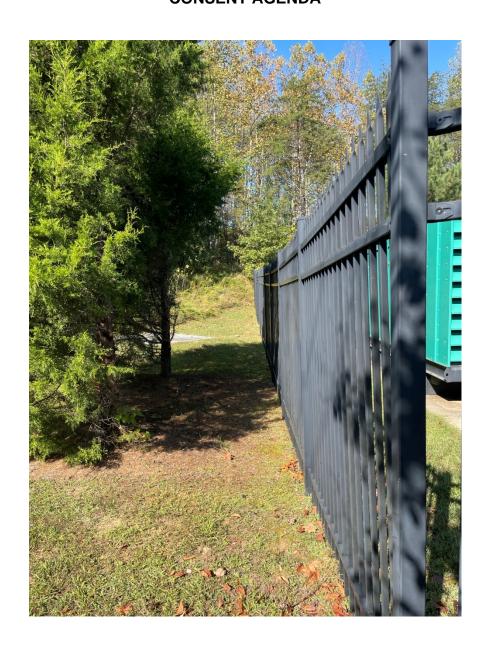
BUDGET IMPACT: None.

RECOMMENDATIONS: None.

BOARD ACTION REQUESTED: None

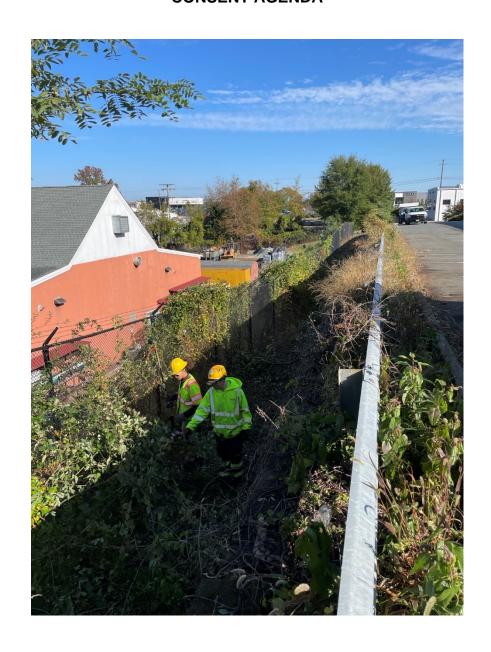
ATTACHMENTS:













AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: Rivanna Water & Sewer Authority (RWSA) Monthly

Update

STAFF CONTACT(S)/PREPARER:

Gary O'Connell,

Executive Director

AGENDA DATE: October 19, 2023

CONSENT AGENDA: Informational

ATTACHMENTS: No

BACKGROUND: This report continues the monthly updates on the Rivanna Water & Sewer Authority (RWSA) projects and Board meetings. Below are some updates on RWSA major projects and issues, including updates from the September 25th RWSA Board Meeting and other communications.

RWSA Board Meeting and other Updates and Approvals at the September 25th Board Meeting:

Year-End Financials: The RWSA Board approved a financial plan to transfer current available reserves for a deficit from the FY '23 Budget year end. This was primarily due to the need to increase the annual operating cash flows (per adopted RWSA Board policy), and significant unplanned cost increases for electricity (40% increase), chemical bids (60% increase), IT security upgrades and unbudgeted wastewater disinfection equipment replacement. RWSA staff is reviewing the FY '24 Budget items to limit the financial impacts.

RWSA Major Capital Project Updates:

RWSA continues to work with UVA to acquire the final easements on the following major water piping projects:

 South Fork Rivanna to Ragged Mountain Reservoir Water Pipe - 8 miles of 36" pipe:

Status: All the required easements with the UVA Foundation for the new raw water pump station (1.7 acres) and for the raw water piping have been signed and recorded. A major milestone in this project.

2. <u>Ragged Mountain Reservoir to Observatory WTP Water Pipe and Pump Station - 5 miles of 36" pipe:</u>

Status: Easement agreements with the UVA Foundation have been signed and recorded. RWSA continues to coordinate with UVA on an alternate pipeline alignment between Fontaine Avenue and the Observatory Water Treatment Plant.

AGENDA ITEM EXECUTIVE SUMMARY

3. <u>Central Water Line - 5 miles of 24" and 36" water pipe primarily along Cherry Avenue:</u>

Status: Engineering plans and specifications are moving forward towards the 90% stage of completion. Construction is expected to begin in December 2024, extended due to delivery of pipe reportedly taking 6-9 months. An extensive communication effort will be completed with the communities adjacent to the project before construction begins. Efforts to obtain easements are underway.

• South Rivanna and Observatory Water Treatment Plant Renovations

Design Engineer: Short Elliot Hendrickson, Inc. (SEH)
Construction Contractor: English Construction Company

Construction Start: May 2020 Percent Completion: 91%

Completion Date: March 2024
Base Construction Contract: \$38,078,262
Approved Capital Budget: \$43,000,000

Current Status:

South Rivanna work essentially completed with continuing sludge pump improvements, general site improvements and final instrumentation programming work. Improvements continue at the Observatory Plant including completion of the new chemical building, GAC building expansion and general site improvements.

History:

The Observatory project includes the design and costs for upgrading the plant systems to achieve an upgraded 10 mgd plant capacity. Much of the Observatory Water Treatment Plant is original to the 1953 construction.

Airport Road Water Pump Station and Piping

Design Engineer: Short Elliot Hendrickson (SEH)

Contractor: Anderson Construction

Construction Start: December 2021

Percent Complete: 60%

Completion Date: September 2024 Budget: \$10,000,000

Current Status:

The block and brick walls have been completed at the pump station. Installation of two parallel water lines along Berkmar Drive is complete. Once water line testing and

AGENDA ITEM EXECUTIVE SUMMARY

disinfection is completed, tie-ins to the existing system will be made. A new water line near the Timberwood Boulevard traffic circle is to be completed.

History:

The Route 29 Pipeline and Pump Station Master Plan was developed in 2007 and originally envisioned as a multi-faceted project that reliably connected the North and South Rivanna pressure bands; reduced excessive operating pressures and developed a new Airport pressure zone to serve the highest elevations near the Airport and Hollymead Town Center. The master plan update was completed in June of 2018 to reflect the changes in the system and demands since 2007.

• Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line and Raw Water Pump Station

Design Engineer: Michael Baker International (Baker)

Project Start:

Project Status:

Construction Start:

Completion:

Current Project Estimate:

August 2018

Design 80%

September 2024

December 2028

\$44,000,000

Current Status:

Preparation of engineering plans and specifications continues. RWSA staff is reviewing plans for the 90% design phase for the water line, which includes the vast majority of the piping to be installed under the project. Easement negotiations with UVA, and the UVA Foundation continue.

History:

Raw water is currently transferred from the Ragged Mountain Reservoir (RMR) to the Observatory Water Treatment Plant by way of two 18-inch cast iron raw water lines, which have been in service for more than 110 and 70 years, respectively. The proposed water line will be able to reliably transfer water to the expanded Observatory Plant, which, upon completion, will have the capacity to treat 10 mgd. The new single water line will be constructed of 36-inch ductile iron and will be approximately 14,000 feet in length.

The RMR to Observatory WTP raw water pump station is planned to replace the existing Stadium Road and Royal Pump Stations, which have exceeded their design lives or will require significant upgrades with the Observatory WTP expansion. The pump station will pump up to 10 mgd of raw water to the Observatory WTP. Integration of the new pump station with the planned South Rivanna Reservoir (SRR) to RMR Pipeline is being planned in the interest of improved operational and cost efficiencies and emergency redundancy. An integrated pump station would also include the capacity to transfer up to 16 mgd of raw water from RMR back to the SRR WTP.

AGENDA ITEM EXECUTIVE SUMMARY

• South Rivanna Reservoir to Ragged Mountain Reservoir Pipeline, Intake and Facilities

Design Engineer: Kimley Horn Project Start: July 2023

Design Status: 5%

Construction Start: June 2026

Completion: December 2030 Current Project Estimate: \$79,700,000

Current Status:

RWSA continues to work with CSX railroad on the draft permit documents. Topographic survey for the pipeline alignment has been completed, and survey of the remaining project locations is underway. Staff are working on the final phases of the SFRR-RMR Nutrient Analysis, with the necessary equipment needed to complete study efforts scheduled to arrive in the Fall, and a final report published in the Winter. All the necessary easements have been acquired for the entire length of the pipeline project.

History:

The approved 50-year Community Water Supply Plan includes the construction of a new raw water pipeline from the South Rivanna River to the Ragged Mountain Reservoir. This new pipeline will replace the Upper Sugar Hollow Pipeline along an alternative alignment to increase raw water transfer capacity in the Urban Water System. The project includes a detailed routing study and water line design to account for recent and proposed development and road projects in Albemarle County and the University of Virginia. Preliminary design, preparation of easement documents, and acquisition of water line easements along the approved route is also being completed as part of this project that will lead to final design of the raw water line, reservoir intake and pump station.

• Beaver Creek Dam, Pump Station, and Piping Improvements

Design Engineer: Schnabel Engineering (Dam)
Design Engineer: Hazen and Sawyer (Pump Station)

Project Start: February 2018
Project Status: 5% Design
Construction Start: April 2026
Completion: January 2029
Budget: \$43,000,000

Current Status:

The design work began, this for the new raw water pump station, intake hypolimnetic oxygenation system, dam spillway upgrades, temporary detour and the spillway bridge.

AGENDA ITEM EXECUTIVE SUMMARY

History:

RWSA operates the Beaver Creek dam and reservoir as the sole raw water supply for the Crozet area. In 2011, an analysis of the Dam Breach inundation areas and changes to Virginia Department of Conservation and Recreation (DCR) *Impounding Structures Regulations* prompted a change in hazard classification of the dam from significant to high hazard. This change in hazard classification requires that the capacity of the spillway be increased, and the dam be replaced. This CIP project includes investigation, preliminary design, public outreach, permitting, easement acquisition, final design, and construction of the anticipated modifications. Work for this project includes a new relocated raw water pump station and intake. RWSA staff will continue to pursue federal funding for later phases of the project to cover a portion (70%) of final design and construction costs.

• South Fork Rivanna River Crossing

Design Engineer: Michael Baker International (Baker)

Project Start:

Project Status:

Project Status:

90% Design

May 2024

Completion:

September 2020

September 2020

Budget: \$7,000,000

Current Status:

Easement acquisition has begun and includes County of Albemarle property in Brook Hill River Park along Rio Mills Road. A required easement on the south side of the river is on a remnant property from the VDOT Berkmar Bridge project and cannot finalize that easement until the property transfer back to the original owner is complete. Additional permitting being sought for the project.

History:

RWSA has previously identified through master planning that a 24-inch water main will be needed from the South Rivanna Water Treatment Plant (SRWTP) to Hollymead Town Center to meet future water demands. Two segments of this water main were constructed as part of the VDOT Rt. 29 Solutions projects, including approximately 10,000 LF of 24-inch water main along Rt. 29 and 600 LF of 24-inch water main along the new Berkmar Drive Extension, behind the Kohl's department store. To complete the connection between the SRWTP and the new 24-inch water main in Rt. 29, there is a need to construct a new river crossing at the South Fork Rivanna River. Acquisition of right-of-way will be required at the river crossing.

AGENDA ITEM EXECUTIVE SUMMARY

• Upper Schenks Branch Interceptor, Phase II

Design Engineer: Frazier Engineering, P.A.

Project Start:
Project Status:
Construction Start:
Completion:

July 2021
Design
TBD
TBD

Current Project Estimate: \$4,725,000

Current Status

After a recent meeting with City and County staff, RWSA has submitted project summary information and an easement on County property with a valuation estimate for the County's review. Initial meetings with County staff are occurring.

• Central Water Line Project

Design Engineer: Michael Baker International (Baker)

Project Start:

Project Status:

Construction Start:

Completion:

Budget:

July 2021

50% Design

December 2024

December 2028

\$41,000,000

Current Status:

Design of construction documents and easement acquisitions is underway. Next steps include conducting soil borings along the alignment.

History:

The hydraulic connectivity in the Urban System is less than desired, creating operational challenges and reduced system flexibility and redundancy. Recent efforts and modeling for the Urban Finished Water Infrastructure Master Plan have determined that a central water line corridor through the City is the best option to hydraulically connect the Observatory Water Treatment Plant to the Urban service area, including the ACSA water service area.

Nov. '23	Dec. '23	ACSA Jan. '24	Feb. '24	Mar. '24	April '24	May '24	June '24	July '24	Pending Issues
1101. 20	DC0. 20	Can 24	100. 24	Mai. 24	April 24	may 24	Guile 24	ouly 24	
November 16th	December 21st	January 18th	February 15th	March 15th	April 18th	May 16th	June 20th	July 18th	Water Supply Plan Project Status Rep
Recognitions Monthly Financial and	Recognitions Monthly Financial and	Recognitions Monthly Financial and	Recognitions Monthly Financial and	Recognitions Monthly Financial and	Recognitions Monthly Financial and	Recognitions Monthly Financial and	Recognitions Monthly Financial and	Recognitions Monthly Financial and	Water Treatment Plants RWSA CIP
CIP Reports	CIP Reports	CIP Reports	CIP Reports	CIP Reports	CIP Reports	CIP Reports	CIP Reports	CIP Reports	Central Water Line-Reservoirs Pipe North Rivanna System
Capital Project Authorizations	Capital Project Authorizations	Capital Project Authorizations	Capital Project Authorizations	Capital Project Authorizations	Capital Project Authorizations	Capital Project Authorizations	Capital Project Authorizations	Capital Project Authorizations	Annual Water Quality Reports (Ma
Annual Financial Report and Audit Report	Annual Investment Report	Board Organizational Meeting - Election of Officers	Operational Presentation - Administration	Operational Presentation - Engineering	Operational Presentation - Maintenance	Operational Presentation - IT	Operational Presentation - Finance	Operational Presentation	Board Organizational Meeting each Ja
Корон		Omeers	Administration	Engineering	Wallterlance		marico		Annual Report - January
Policy Level Documents	Budget Guidelines and Schedule for FY '25 Budget/Rates (Irrigation Rate Structure; Rate Model)	Strategic Plan Update 2023-2027	AMI Project Status Report	Proposed CIP Presentation	Proposed FY '25 Capital Improvements Program (CIP) Presentation	Proposed FY '25 Budget and Rates Workshop	FY '25 Budget and Rates Public Hearing	Strategic Plan Update	Water Audit and Energy Audit
									Rate Model Update Spring 2025
Ragged Mountain	Holiday Schedule	Annual Report 2023 -		"Fix a Leak" Water	Proposed FY '25	Annual Water Quality	FY '25 Budget, Rates	AMI Portal - Customer	Strategic Plan Updates-2023-202
Dam Agreement Amendment; Water	2024	Customer Experience; Employee of the		Conservation Event	Capital Improvements Program (CIP) Public	Reports	and CIP Approval	Information	January and July Fats, Oils, and Grease (FOG) Prog
Supply Update		Month; Projects, etc.			Hearing				Climate Change and Sustainabili
Customer Experience	Board Meeting	Annual Water			Proposed FY '25		Amendments to Rules		Annual Water Conservation Repo
	Schedule 2024	Conservation Report			Budget and Rates		and Regulations, and		January
(Customer Focused Transformations)					Overview		Personnel Management Plan		
···ai.o.oaoo,							(Budget Implementation)		Operational Presentation-Sewer Re Relining
							,		
					Resolution Scheduling Budget and Rates Public Hearing for June 20, 2024		Water Professionals Appreciation Day Recognition		National Drinking Water Week-Ap Imagine a Day Without Water - Septe
					National Drinking		Water Quality Update		Federal/State Water Quality Regula
					Water Week Resolution		Annual Drinking Water Quality Report		Lead and Copper (12/25); PFAS; Em- Contaminants
									Emergency Preparedness - Regio Exercise
									Annual Investments Report December
									Operational Presentations
									ACSA Customer Communication
									Avon Satellite Operations Cente
									Federal Infrastructure Grant Fund
									Data Management and Manageme Dashboards
									Purchasing Policy Revisions
Executive Session - Executive Director Mid-Year Review				Executive Session - Executive Director Annual Performance					Customer Experience (CX)
	ĺ			Review					

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: Advanced Metering Infrastructure (AMI) Monthly Update

STAFF CONTACT/PREPARER:

Quin Lunsford, Director of Finance

AGENDA DATE: October 19, 2023

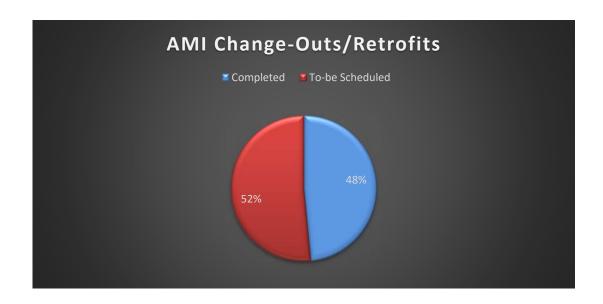
ACTION: Informational

ATTACHMENTS: No

BACKGROUND: The ACSA Board authorized staff at its October 2019 meeting to execute agreements related to the AMI project. Monthly status updates are provided below:

DISCUSSION: Authority staff continues to collaborate closely with the selected vendor (Core & Main/Sensus) and the project management consultant (Esource). Notable accomplishments since the last update include:

- The final phase of the AMI began April 3rd and our installers have successfully upgraded 7,850+ meters. Approximately 48% of the ACSA's system is fully operational under the AMI program. Going forward, we anticipate between 65 and 100 meter upgrades each day.
- The second graphic below illustrates daily and weekly progress.



ALBEMARLE COUNTY SERVICE AUTHORITY AGENDA ITEM EXECUTIVE SUMMARY

			Reading Rate													
	Total	Goo	od No Read		nd Ba	d Read	Stale	Unable	Read Rat	e						
	7850	78	302		1	4	43	0	99.3	88						
Тур	æ		Size	:	Install	INC	Sked	Unable	Remove	RTU						
Me	terChan	ge	3/4	-inch	560	1768	0	5	96	2						
Me	terChan	ge	1 1,	2-inch	(0 0	0	0	1	0						
Me	terChan	ge	1-ir	ch	214	38	0	2	10	1						
Ret	rofit		3/4	-inch	2086	9938	0	1	6	C						
_	rofit		1-in	ch	28	3 298	0	0	1	0						

					We	ekly Pr	oducti	on					
200	1 105 154 2 2023 16-2023	11 11 11 259 290 290 18-2023		18 25 294 22-2023 24	11 19 228 119 202 172 179 202 172 1-2023 26-202	219 2	10 24 33 307 28 317 81 13 30-2023	28 30- 0 423 209 32-2023	217 176 217 208	265 246 36-2023	339 416	11 291 40-2023	MeterChange Retrofit Unable
***	2023 10-2023	10-2023	20-2025	22-2023 2		aily Pro			34-2023	30-2023	30-2023	10-2023	
150	2444 111	155 76	1431 14	12491	11 342 1	1 27 1 31 57	13 6 3 3[154 2	4 1 3	2 5 1 1 0 0 0 4 1	56345	2	MeterChange Retrofit Unables
50 4	8119113 ¹⁵ F	085 0 713	2 2 22 7 8 21	26162919	14197/5	32508	1925 6 88	2 353 54	17 3 46		B B B B B B B B B B B B B B B B B B B	2022	

BUDGET IMPACT: Informational only.

RECOMMENDATIONS: None

BOARD ACTION REQUESTED: None; informational item only.

ATTACHMENTS: N/A

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: Customer

Information System

STAFF CONTACT/PREPARER:

Quin Lunsford, Director of Finance

AGENDA DATE: October 19, 2023

ACTION: Informational

ATTACHMENTS: Yes

BACKGROUND: The Authority has identified a need to analyze, review, and upgrade our current customer billing system for replacement. The current billing system has been in service 30+ years and while it remains a reliable system for billing, it lacks many customer and operational facets that have been developed to enhance the customer experience and operational efficiencies. Through the Capital Improvement Program budget process, funds have been allocated to procure consulting services related to analyzation and preparation for replacement.

DISCUSSION: The Customer Information System (CIS) project as described in the ACSA's Capital Improvement Program allocates resources for consulting services to assist with a review of current business processes, technology, development of a roadmap, RFP development/review, and contract negotiations with the highest rated proposers for a CIS, phone system replacement, and website redesign.

While the new system will include a customer billing component, Customer Information Systems more broadly store and provide access to all data related to a customer for appropriate Authority users. Modern Customer Information Systems provide relevant customer information in a centralized, easily accessible, and intuitive system to ensure our staff have pertinent information to better serve our customers. As Customer Information Systems integrate with internal phone systems and websites, we will review in conjunction with one another to ensure integration compatibility and optimization.

The Authority issued an RFP earlier this year and received multiple proposals. The proposals were reviewed and scored by representatives from multiple departments. We are currently reviewing a Statement of Work from the most highly rated proposer and anticipate issuing a notice of intent to award within the next month. The consultant will provide advisory consulting services to assist the Authority with assessments and define our needs and requirements, evaluate, select, and contract with a technology and service provider for a new CIS, website, and phone system solution.

We anticipate five high-level phases which include: assessment, planning, acquisition, installation, and post go-live support. Upon contract execution, we anticipate the analysis and deployment of this project to last 18-24 months. This project aligns with all four of the Authority's Strategic Plan themes but most importantly will facilitate enhanced service for our customers using modern technologies and optimization of data authority wide.

ALBEMARLE COUNTY SERVICE AUTHORITY AGENDA ITEM EXECUTIVE SUMMARY

BUDGET IMPACT: Informational only.

RECOMMENDATIONS: None

BOARD ACTION REQUESTED: None; informational item only.

ATTACHMENTS: CIS PowerPoint Presentation



Customer Information System (CIS) Project



- What is a Customer Information System (CIS)
- Current Billing System Overview
- CIS/Phone/Website Project



What is a modern Customer Information System (CIS)

- It's a comprehensive software system that:
 - Centrally manages customer data, billing, and other pertinent customer information
 - Flexible platform that is highly configurable
 - Performs billing process functions that are streamlined, customer focused, and align with customer preferences
 - Provides unique identification for each customer allowing Authority staff to manage, document, and record all interactions

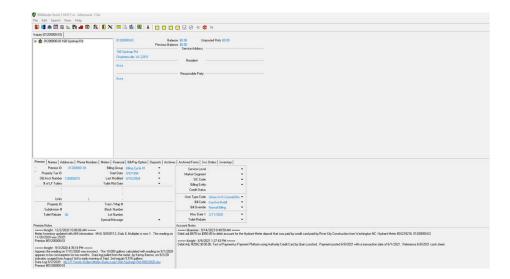


Current Billing System Overview - BillMaster

BillMaster

- In service at the ACSA for 30+ years
- Stable and reliable platform but limited
- Manual processes to extract information for purposes other than billing
- Limited access/accessibility for those outside of the customer service team

BillMaster Interface





CIS/Phone System/Website Redesign Consulting Services

REQUEST FOR PROPOSAL NON-PROFESSIONAL SERVICES



Issue Date: May 17, 2023 RFP# 2023007-FN-NP

Title: Customer Experience/Customer Information System (CIS) Assessment/Website Enhancement/Phone System Analysis/Project Management Services

Issuing Agency: Albemarle County Service Authority

168 Spotnap Road Charlottesville, VA 22911

Period Of Contract: N/A

Sealed Proposals Will Be Received Until 3:00 p.m. E.S.T. on June 23, 2023 For Furnishing The Services Described Herein. Proposals received after the announced time and date for receipt will remain unopened. No telephoned, faxed, or emailed proposals will be considered.

The face of the envelope or shipping container shall be clearly marked in the lower left-hand corner as follows:

RFP#:	2023007-FN-NP				
TITLE:	Customer Experi	information	System	(CIS)	
	Assessment/Website Management Services		hone System	Analysi	s/Project
PROPOSAL DUE:	June 23, 2023				

All Inquiries For Information Should be Submitted by email To: Quin G Lunsford, Finance Director, at qlunsford@serviceauthority.org.

PROPOSALS MUST BE SHIPPED/MAILED OR HAND DELIVERED TO THE ADDRESS SHOWN ABOVE.

RFP Process Overview

- Publicly advertised RFP in May 2023 for consulting services and deployment support
- ACSA CIS committee evaluated/rated proposals
- Interviewed two highest rated proposers
- Evaluating Statement of Work/contract of highest rated proposer



CIS/Phone System/Website Redesign Consulting Services

Consulting Services Overview

- Assessment
 - CIS/website/telephony requirements
- Plan
 - Create/Develop RFPs
- Acquire
 - Evaluation of Proposals
 - Contract
- Installation
 - Program Execution
- Post go-live
 - Monitor and optimization of systems





AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: PFAS Proposed

Class Action Settlement

STAFF CONTACT(S)/PREPARER:

Gary O'Connell, Executive Director Mike Derdeyn, ACSA Attorney

AGENDA DATE: October 19, 2023

ACTION: Yes

ATTACHMENTS: Yes

BACKGROUND: PFAS (per- and polyfluoroalkyl substances) are a class of thousands of synthetic chemicals found in many different consumer, commercial, and industrial products, including firefighting foams. Current scientific studies have shown that exposure to certain levels of PFAS may lead to kidney, testicular, and prostate cancer, and have effects on the reproductive and immune systems, and the number of claims grows daily. EPA is expected to release guidelines on PFAS in public drinking water by early 2024.

As the first PFAS bellwether trial was set to begin in June 2023 in the City of Stuart, Florida, two massive settlements were announced. The City alleged Defendants (3M, Dupont and others) were subject to liability for strict product liability, negligence, and nuisance claims arising from alleged design defects and failure to warn regarding the environmental hazards and toxic effects of PFAS in firefighting foam.

Defendants "3M" reached a tentative settlement to pay between \$10.3 billion and \$12.5 billion, and DuPont de Nemours, Inc., Chemours Company, and Corteva, Inc. ("DuPont") agreed to pay \$1.185 billion. The settlement monies will be earmarked to cover testing and remediation costs related to PFAS in drinking water aquifers.

Both settlements are tentative and require court approval, and the number of plaintiffs who will share in the settlement funds will not be known for several years.

United States District Court Judge Richard Gergel in Charleston presides over the PFAS multidistrict litigation proceeding ("MDL"). MDLs are employed in mass tort cases to help streamline litigation and facilitate settlements and consistent rulings on critical issues. The City of Stuart case is an example, as it was the first bellwether trial and led to the two big, proposed settlements.

AGENDA ITEM EXECUTIVE SUMMARY

There are currently over 5,000 cases total in the MDL, and more cases are added nearly every day. The cases in the MDL fall into three distinct categories:

- 1. Personal injury plaintiffs claiming injury from exposure to PFAS.
- 2. Actions filed by individual states by Attorney Generals for natural resource and other damages.
- 3. Public water supplier plaintiffs seeking drinking water testing and remediation costs.

The 3M and DuPont settlements pertain only to the last category of cases. There are over 440 public water supplier plaintiffs in the MDL; however, approximately six to seven thousand more public water suppliers are eligible to participate in the settlements. The ACSA has been notified of the proposed settlements and the claims form process to file if we would like to seek awards under the settlements.

How the proposed settlement will work:

The settlements are proposed as "class settlements," and therefore require approval from Judge Gergel. Basically, to be eligible, the public water supplier must have positive detections of PFAS in its water system, whether currently or during testing over the next several years. We have had a very limited number of small detections, but a couple that would qualify to file the claim form and seek an award. Also neither we, nor RWSA, to this point have had any specific PFAS related expenses except the testing regiman that has been going on for the past four years. Public water suppliers may choose to opt-out of the settlements. A complicated calculus will be employed to determine the amount each public water supplier will be eligible to recover, depending upon such technical aspects as flow rates in the distribution systems and magnitude of contamination.

The proposed settlements would apply to a large number of public water suppliers in the United States, even those that have not sued and those that have not yet tested for PFAS in their water supplies.

The settlement agreements put the onus on the individual public water suppliers to proactively opt in or out, whether or not they have filed suit or even tested for PFAS. If the settlements are approved public water suppliers will have a 60-day window to determine whether to opt out of the proposed class.

The opposition briefs have uniformly criticized the amounts of the settlements as insufficient to cover the nationwide PFAS-related damages caused by the settling defendants, but that is what the settlement agreement is offering.

AGENDA ITEM EXECUTIVE SUMMARY

The reality is that individual public water suppliers will receive varying amounts from the settlements, and it appears likely that the bulk of those plaintiffs will not receive full compensation for all costs.

Lastly, it is important to emphasize that these two settlements focus on liability only to public water supplier plaintiffs for those damages associated with drinking water aquifers and supplies. Although these settlements are for an enormous amount of money, PFAS liabilities (and costs to defend such actions) will extend far and above the costs to be incurred by the public water supplier plaintiffs involved in the settlements.

DISCUSSION: We believe the ACSA should join the settlements, even though we have had minimal PFAS laboratory detections. We know that we likely will have future costs by adding additional GAC (Granular Activated Carbon) at all our treatment plants. Additional Crozet GAC is under design now. GAC acts as a barrier to PFAS and other contaminants. Any funds from the settlement could be used towards these future costs.

BOARD ACTION REQUESTED: Motion to Authorize the Executive Director to register for a PFAS Settlement Agreement Claims Form / Account

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: Corporate Roles and

Responsibilities

STAFF CONTACT(S)/PREPARER:

Gary O'Connell, Executive Director and Mike Derdeyn, ACSA Attorney

AGENDA DATE: October 19, 2023

ACTION: Informational

ATTACHMENTS: Yes

BACKGROUND: Section 15.2-5113 of the Virginia Water and Waste Authorities Act authorizes the Board to appoint an executive to manage the affairs of the authority: "The board members may appoint a chief administrative or executive officer who shall serve at the pleasure of the board members. He shall execute and enforce the orders and resolutions adopted by the board members and perform such duties as may be delegated to him by board members."

We believe there is a "gap" in clarity over the responsibilities of the Executive Director because those responsibilities are not defined in the By-Laws. Article III of the By-Laws identifies that the "officers... shall consist of a Chair, a Vice-Chair, a Secretary-Treasurer, and an Executive Director." Article IV describes the "Duties of Officers" but neglects to provide any description of the duties of the Executive Director. We have been doing some research with other Virginia authorities and have drafted a by-laws amendment we believe would be appropriate for the ACSA (draft attached). We also found a resolution that provides clearer authority than at present for the Executive Director, especially in the authority to sign contracts and other "instruments" on behalf of the authority (a draft resolution is attached).

We think these legally make sense, provide a greater level of authorization that is now lacking, and more concretely in the by-laws and resolution recommendation provides a clear authorization for the responsibilities of the Executive Director.

RECOMMENDATION: For discussion, by-law changes require a 10-day notice be given of a proposed change.

BOARD ACTION REQUESTED: Informational for today's meeting and for Board discussion. Consider placing on the November 16th Board agenda for adoption.

ATTACHMENTS:

- -Resolution concerning Authority of the Executive Director
- -Complete ACSA By-Laws with redline edits of the proposed amendment
- -Current ACSA By-Laws

NOVEMBER 16, 2023 DRAFT

ACSA By-Laws Amendment Proposal Article IV – Duties of Officers

ARTICLE IV - DUTIES OF OFFICERS

- 4-1. The duties of the Chair are:
 - a. To preside at all meetings.
 - b. To appoint all committees, with the exception of the Executive Committee.
 - c. To rule on procedural questions (subject to a reversal by a 2/3 vote of members present).
 - d. To carry out other duties as assigned by the authority.
- 4-2. The duties of the Vice-Chair are:
 - a. To act in the absence of the Chair.
- 4-3. The duties of the Secretary-Treasurer are:
 - a. To keep a written record of all business transacted by the authority.
 - b. To notify members of the meetings.
 - c. To keep all official records and reports of the authority.
 - d. To certify all records, and reports of the authority.
 - e. To attend to the correspondence of the authority.
 - f. To keep a record of the minutes of meetings.

4-4. The duties of the Executive Director are:

- a. To be the Chief Executive Officer serving at the pleasure of the Board, as provided in Section 15.2-5113(E) of the Virginia Code.
- b. To administer the affairs of the Authority consistent with the provisions of the Rules and Regulations of the Authority, as adopted by the Board.
- c. To execute and enforce the policies, orders, resolutions, budgets and agreements adopted by the Board.
- d. To sign contracts and other instruments on behalf of the Authority as authorized by the Board.
- e. To perform such other duties as may be delegated by the Board from time to time by resolutions.

ALBEMARLE COUNTY SERVICE AUTHORITY (ACSA) RESOLUTION CONCERNING AUTHORITY OF THE EXECUTIVE DIRECTOR

WHEREAS, pursuant to Section 15.2-5114 of the Virginia Code, ACSA is authorized to procure goods, services, insurance and construction, consistent with the requirements of Section 2.2-430 et seq. of the Virginia Code (the "Virginia Public Procurement Act"); and

WHEREAS, pursuant to Section 2.2-4302 of the Virginia Code, ACSA is authorized to adopt procurement resolutions and regulations consistent with the Virginia Public Procurement Act; and

WHEREAS, pursuant to Section 15.2-5113 of the Virginia Code, the ACSA Executive Director shall perform such duties as may be delegated by the Board; and

WHEREAS, pursuant to Article IV, Section 4.4 of the By-Laws of the Authority, the Board may specifically authorize the Executive Director to sign contracts and other instruments on behalf of the Authority.

NOW, THEREFORE BE IT RESOLVED that the Board of Directors does hereby authorize the Executive Director as Secretary-Treasurer (or a designee) to sign on behalf of the Authority the following categories of contracts and other instruments that are in accordance with the general policies and directives of the Authority:

- 1. Contracts for goods or services authorized in the Annual Operating and CIP Budgets adopted by the Board.
- 2. Developer Agreements for On-Site Facilities and Main System Extensions including reimbursement agreements for design and construction of improvements that exceed the Developer's responsibilities.
- 3. Community Water and Wastewater Agreements.
- 4. Betterment Agreements for design and construction of improvements to existing ACSA infrastructure that are affected by other construction projects such as road improvements.
- 5. Deeds of Easement.
- 6. Draws Upon Letters of Credit.
- 7. Demands Upon Bonds, and
- 8. As Secretary-Treasurer, any documents or instruments pursuant to his authority as custodian of the funds of the Authority;
- 9. Other documents or instruments expressly approved by the Board;
- 10. This resolution shall take effect immediately.

NOVEMBER 16, 2023 DRAFT

CERTIFICATE

The undersigned Secretary of the Albemarle County Service Authority certifies that the forgoing is a true, correct and complete copy of a Resolution adopted by affirmative vote of a majority of the members of the Board present at a public meeting duly called and held on
Gary O'Connell, Executive Director/Secretary-Treasurer

CURRENT BY-LAWS

BY-LAWS

ALBEMARLE COUNTY SERVICE AUTHORITY

ARTICLE I - **PREAMBLE**

- 1-1. This authority was created on April 16, 1964, by action of the Board of Supervisors of the County of Albemarle, under provisions of Virginia Water and SewerWaste Authorities Act, Section 15.1-1239 through 15.1-1270, Code of Virginia, 1950, as amended.
- 1-2. The official title of this authority is designated by the aforesaid Board of Supervisors is: "Albemarle County Service Authority".
- 1-3. These bylaws or rules for the transaction of the business of this authority are made pursuant to authority vested in this authority under Section 15.1-1250(b) of the Code of Virginia of 1950 as amended and in accordance with the general provisions of the laws of the Commonwealth of Virginia governing water and sewerwaste authorities as set forth in said 1950 Code in Chapter 28, Title 9, Virginia Water and SewerWaste Authorities Act.

ARTICLE II - MEMBERS

- 2-1. This authority shall consist of six members, said members to be appointed by the Board of Supervisors pursuant to Section 2-702 of the Albemarle County Code.
- 2-2. All members of this authority are appointed by the Albemarle County Board of Supervisors for terms of four (4) years.
- 2-3. The authority may provide for the payment of expenses of this authority and a reasonable compensation for members of the authority who are not county employees.
- 2-4. Any vacancy in membership will be filled by appointment of the County Board of Supervisors and such appointments will be for the unexpired term only.
- 2-5. Any appointed member may be removed by the Albemarle County Board of Supervisors for inefficiency, neglect of duty, or malfeasance or misfeasance in office.

ARTICLE III - OFFICERS AND THEIR SELECTION

- 3-1. The officers of the Service Authority shall consist of a Chair, a Vice-Chair, a Secretary-Treasurer and an Executive Director. The Secretary-Treasurer and the Executive Director need not be members of the authority.
- 3-2. Nomination of officers shall be made from the floor at the annual meeting held in January of each year. The elections shall take place at the same meeting.
- 3-3. A candidate receiving a majority vote of the entire membership of the Service Authority shall be declared elected. The elected member shall take office immediately and serve for one (1) year, or until a successor takes office.
- 3-4. Vacancies shall be filled by regular election procedures at the next regular meeting.

ARTICLE IV - DUTIES OF OFFICERS

- 4-1. The duties of the Chair are:
 - a. To preside at all meetings.
 - b. To appoint all committees, with the exception of the Executive Committee.
 - c. To rule on procedural questions (subject to a reversal by a 2/3 vote of members present).
 - d. To carry out other duties as assigned by the authority.
- 4-2. The duties of the Vice-Chair are:
 - a. To act in the absence of the Chair.
- 4-3. The duties of the secretary-treasurer are:
 - a. To keep a written record of all business transacted by the authority.
 - b. To notify members of the meetings.
 - c. To keep all official records and reports of the authority.
 - d. To certify all records, and reports of the authority.
 - e. To attend to the correspondence of the authority.
 - f. To keep a record of the minutes of meetings.

ARTICLE V - COMMITTEES

5-1. Special Committees: The Chair may appoint such special committees as deemed necessary.

ARTICLE VI - MEETINGS

- 6-1. Regular meetings of the authority shall be held monthly on the third Thursday of the month at 9:00 a.m.
- 6-2. Special meetings shall be called at the request of the Chair or at the request of a majority of the membership. Written notice of meetings shall be given to each member at least two (2) days prior to such meetings.
- 6-3. All regular meetings, records, and accounts shall be open to the public.
- 6-4. A majority (4 of 6) of the membership of the authority shall constitute a quorum. In any meeting where there is otherwise a quorum and any member declares a potential conflict of interest on any matter of business the remaining eligible members shall constitute a quorum for the transaction of that business matter. Approval of any business matter shall require a majority vote of eligible non-abstaining members. Voting may be by roll call, in which case a record shall be kept as part of the minutes.
- 6-5. If a quorum is physically present to conduct a meeting of the Authority's Board of Directors or one of its committees, other members may attend and participate in such meeting from a remote location by telephone or other audio or video means, provided such attendance complies with the provisions of the Virginia Freedom of Information Act, as amended from time to time. A member wishing to attend in this manner shall advise the clerk of the board a reasonable time before start of the meeting, so that the necessary equipment can be put in place.

ARTICLE VII - ORDER OF BUSINESS

- 7-1. The order of business of a regular meeting shall be:
 - a. Call to order by the Chair.
 - b. Determination of a quorum.
 - c. Approval of minutes of regular meeting and of executive committee meetings.
 - d. Matters from the public.
 - e. Consent Agenda.
 - f. Matters of business and discussion.
 - g. Matters not listed on the agenda.
 - h. Adjournment.
- 7-2. Parliamentary procedure in authority meetings shall be governed by the adopted rules of order, namely <u>Robert's Rules of Order</u>.

ARTICLE VIII - AMENDMENTS

8-1. These rules, excepting Articles I and II, may change by a two-thirds vote of the entire authority after ten days notice has been given them of the projected change.

BY-LAWS ADOPTED: January 17, 1966

AMENDED: March 9, 1967 March 9, 1978

April 17, 1986

December 18, 1997 December 16, 1999 December 17, 2009

July 17, 2014 February 18, 2016 March 17, 2016 November 19, 2020