RIVANNA

WATER & SEWER AUTHORITY

Board of Directors Meeting

October 22, 2024

2:15pm

RIVANNA WATER & SEWER AUTHORITY
695 Moores Creek Lane | Charlottesville, Virginia 22902-9016
434.977.2970
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www.rivanna.org

BOARD OF DIRECTORS

Regular Meeting of the Board of Directors of the Rivanna Water & Sewer Authority

DATE: **OCTOBER 22, 2024**

LOCATION: **Rivanna Administration Building (2nd Floor Conference Room), 695 Moores Creek Lane, Charlottesville, VA 22902**

TIME: **2:15 p.m.**

AGENDA

1. ***CALL TO ORDER***

2. ***AGENDA APPROVAL***

3. ***MINUTES OF PREVIOUS BOARD MEETING ON SEPTEMBER 24, 2024***

4. ***RECOGNITION***
   Resolution of Appreciation for Robert Haacke, Wastewater Department Manager

5. ***EXECUTIVE DIRECTOR'S REPORT***

6. ***ITEMS FROM THE PUBLIC***
   Matters Not Listed for Public Hearing on the Agenda

7. ***RESPONSES TO PUBLIC COMMENTS***

8. ***CONSENT AGENDA***

   a. *Staff Report on Finance*

   b. *Staff Report on Operations*

   c. *Staff Report on CIP Projects*

   d. *Staff Report on Administration and Communications*

   e. *Staff Report on Wholesale Metering*

   f. *Staff Report on Drought Monitoring*

9. OTHER BUSINESS

a. Presentation: Financial Update and Year-end Results
Lonnie Wood, Director of Finance and Information Technology
Stephanie Deal, Finance Manager

b. Presentation and Vote to Consider Approval: Construction Contract Award and CIP Amendment; Ragged Mtn to Observatory WTP Raw Water Pipeline and Pump Station
Jennifer Whitaker, Director of Engineering & Maintenance

c. Presentation: Major Capital Projects Update
Scott Schiller, Engineering Manager

10. OTHER ITEMS FROM BOARD/STAFF NOT ON THE AGENDA

11. CLOSED MEETING

(Motion, second and roll call vote to enter into a closed session to discuss or consider confidential information related to the terms of a purchase and sale agreement or the terms of a lease agreement pertaining to acquisition or lease of real property located in the City of Charlottesville, Virginia, where discussion in an open session would adversely affect the bargaining position or negotiating strategy of the Rivanna Water and Sewer Authority, as permitted by the exemptions at Section 2.2-3711-A(3) of the Code of Virginia).

Motion: I move that the Rivanna Water & Sewer Authority enter into a closed session to discuss confidential information related to the terms of a purchase and sale agreement or the terms of a lease agreement pertaining to the acquisition or lease of real property located in the City of Charlottesville, Virginia, where discussion or consideration of the acquisition or lease of real property for a public purpose in an open session would adversely affect the bargaining position or negotiating strategy of the Rivanna Water and Sewer Authority, as permitted by the exemptions at Section 2.2-3711-A(3) of the Code of Virginia.*

12. CERTIFY CLOSED MEETING

(Motion, second and roll call vote to certify the closed session)

Motion: The Rivanna Water and Sewer Authority hereby certifies by recorded vote that, to the best of each member's knowledge, only public business matters lawfully exempted from the open meeting requirements of the Virginia Freedom of Information Act, and those public business matters as were identified in the motion authorizing the closed meeting were heard, discussed or considered in the closed meeting to which this certification resolution applies.*

** Closed meeting motion subject to change**

13. ADJOURNMENT

GUIDELINES FOR PUBLIC COMMENT AT RIVANNA BOARD OF DIRECTORS MEETINGS

If you wish to address the Rivanna Board of Directors during the time allocated for public comment, please raise your hand or stand when the Chairman asks for public comments.

Members of the public requesting to speak will be recognized during the specific time designated on the meeting agenda for "Items From The Public, Matters Not Listed for Public Hearing on the Agenda." Each person will be allowed to speak for up to three minutes. When two or more individuals are present from the same group, it is recommended that the group designate a spokesperson to present its comments to the Board and the designated speaker can ask other members of the group to be recognized by raising their hand or standing. Each spokesperson for a group will be allowed to speak for up to five minutes.

During public hearings, the Board will attempt to hear all members of the public who wish to speak on a subject, but it must be recognized that on rare occasion comments may have to be limited because of time constraints. If a previous speaker has articulated your position, it is recommended that you not fully repeat the comments and instead advise the Board of your agreement. The time allocated for speakers at public hearings are the same as for regular Board meetings, although the Board can allow exceptions at its discretion.

Speakers should keep in mind that Board of Directors meetings are formal proceedings and all comments are recorded on tape. For that reason, speakers are requested to speak from the podium and wait to be recognized by the Chairman. In order to give all speakers proper respect and courtesy, the Board requests that speakers follow the following guidelines:

- Wait at your seat until recognized by the Chairman.
- Come forward and state your full name and address and your organizational affiliation if speaking for a group;
- Address your comments to the Board as a whole;
- State your position clearly and succinctly and give facts and data to support your position;
- Summarize your key points and provide the Board with a written statement, or supporting rationale, when possible;
- If you represent a group, you may ask others at the meeting to be recognized by raising their hand or standing;
- Be respectful and civil in all interactions at Board meetings;
- The Board may ask speakers questions or seek clarification, but recognize that Board meetings are not a forum for public debate; Board Members will not recognize comments made from the audience and ask that members of the audience not interrupt the comments of speakers and remain silent while others are speaking so that other members in the audience can hear the speaker;
- The Board will have the opportunity to address public comments after the public comment session has been closed;
- At the request of the Chairman, the Executive Director may address public comments after the session has been closed as well; and
- As appropriate, staff will research questions by the public and respond through a report back to the Board at the next regular meeting of the full Board. It is suggested that citizens who have questions for the Board or staff submit those questions in advance of the meeting to permit the opportunity for some research before the meeting.

The agendas of Board meetings, and supporting materials, are available from the RWSA/RSWA Administration office upon request or can be viewed on the Rivanna website.

Rev. September 7, 2022

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RWSA BOARD OF DIRECTORS
Minutes of Regular Meeting
September 24, 2024

A regular meeting of the Rivanna Water and Sewer Authority (RWSA) Board of Directors was held on Tuesday, September 24, 2024 at 2:28 p.m. at the Rivanna Administration Building (2nd Floor Conference Room), 695 Moores Creek Lane, Charlottesville, VA 22902.

Board Members Present: Mike Gaffney, Brian Pinkston, Quin Lunsford, Lauren Hildebrand Ann Mallek (remote), Jeffrey Dumars (as alternate for Jeff Richardson)

Board Members Absent: Jeff Richardson, Sam Sanders

Rivanna Staff Present: Bill Mawyer, David Tungate, Betsy Nemeth, Jacob Woodson, Scott Schiller, Austin Marrs, Tia Waters, Brian Haney, George Cheape, Deborah Anama

Attorney(s) Present: Valerie Long

1. *CALL TO ORDER*
Mr. Gaffney convened the September 24, 2024 regular meeting of the Board of Directors of the Rivanna Water and Sewer Authority at 2:28 p.m.

2. *REMOTE PARTICIPATION REQUEST – MS. ANN MALLEK*
Ms. Mallek stated that she was located along Route 29 Southbound in Fauquier County. She stated that she was unable to get to the meeting in time due to a meeting obligation in northern Virginia and the traffic on her return.

Mr. Pinkston moved that the Board allow Ms. Mallek to participate in the meeting remotely. Ms. Hildebrand seconded the motion, which carried unanimously (4-0). (Mr. Richardson and Mr. Sanders were absent)

3. *AGENDA APPROVAL*

Mr. Pinkston moved to approve the Agenda as amended. Ms. Hildebrand seconded the motion, which carried unanimously (5-0). (Ms. Mallek was remote; Mr. Richardson and Mr. Sanders were absent)

4. *MINUTES OF PREVIOUS BOARD MEETING ON AUGUST 27, 2024*

Mr. Pinkston moved the Board to approve the minutes from the meeting held on August 27, 2024. Ms. Hildebrand seconded the motion, which carried unanimously (5-0). (Ms. Mallek was remote; Mr. Richardson and Mr. Sanders were absent)

5. *RECOGNITIONS*
There were none.

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6. *EXECUTIVE DIRECTOR'S REPORT*

Mr. Mawyer stated that he would like to express his gratitude to Jeff Dumars for joining them and filling in for Mr. Richardson. He stated that they presented to the Board in July 2023 a new organizational development plan. He stated that this plan established a Director of Administration and Communications Division position to support the succession management plan. He stated that they also created an Outreach and Communications Coordinator position to be filled in the current fiscal year.

Mr. Mawyer stated that the role of this position was to support their strategic plan to coordinate with the community and elevate the Authorities' profile. He stated that through a competitive recruitment process, our Human Resources department was excited to hire Ms. Tia Waters. He stated that Ms. Waters was joining them from the Virginia Department of Social Services and previously worked at the Blue Ridge Health District, where she was involved in community engagement. He stated that Tia would be their new Outreach and Communications Coordinator.

Mr. Mawyer stated that in support of their succession management program, they had identified that they might need a new Wastewater Manager in some years. He stated that their current Wastewater Manager, Rob Haacke, had announced his retirement to be effective at the end of October. He stated that they would celebrate his retirement next month. He stated that through a competitive process, our Assistant Wastewater Manager, Brian Haney, had been selected as the new Wastewater Manager.

Mr. Mawyer stated that Mr. Haney was a success story that had grown within their organization. He stated that Mr. Haney had been with them for over 20 years. He stated that Mr. Haney had started as a filter press operator and had served in various positions, from staff operator to supervisor, and he eventually became the Assistant Manager. He stated that Mr. Haney had been promoted to be their Wastewater Manager. He stated that Mr. Haney would manage their four wastewater treatment plants and was responsible for 17 employees in his division.

Mr. Mawyer stated that he and Mr. Haney had identified that attaining a college degree would be beneficial to his career. He stated that with support from RWSA, Mr. Haney had been attending Piedmont Community College and had recently received his Associate Degree. He stated that they congratulated him on his academic achievement.

Mr. Mawyer stated that he also wanted to recognize IT Technicians, Will Dobson for receiving the CompTIA cybersecurity certification, and Jacob Woodson for earning the CompTIA Network Plus certification. He stated that these certifications validated their IT infrastructure skills for troubleshooting, configuring, and managing networks. He stated that their IT team was expanding its skills. He stated that September 17 was National IT Professionals Day, and he expressed his gratitude to Jeff Southworth, IT Manager, and the entire team for their efforts in maintaining our IT systems.

Mr. Mawyer stated that he wanted to thank Ms. Anama for organizing the quarterly team-building event and breakfast. He stated that September was National Preparedness Month, and last month, the management team reviewed the Rivanna Emergency Operations Plan, Emergency

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Response Plan, and the Regional Emergency Management Plan. He stated that they briefly discussed the City Emergency Operations Plan, as well.

Mr. Mawyer stated that they invited Thomas Hutka, the Director of Utilities for Greene County, for a virtual and windshield tour of their facilities. He stated that they discussed the $150 million that Rivanna had invested in its water supply infrastructure over the past 20 years and the $200 million that they planned to invest over the next five years. He stated that although they did not have additional water to share with Greene County, they were available to support Greene with other utility challenges.

Mr. Mawyer stated that a number of staff attended the annual joint meeting in Virginia Beach, where the Virginia American Water Works Association and the Water Environment Association convened. He stated that Ms. Jennifer Whitaker, Director of Engineering and Maintenance, presented on their construction program, highlighting the upcoming CIP projects. He stated that Mr. Rob Haacke, Wastewater Manager, gave a presentation on a procedure he came up with to optimize power savings by reducing dissolved oxygen in their aeration system in wastewater, which was a great example of their efforts to maximize treatment processes while not over oxygenating.

Mr. Mawyer stated that Ms. Whitaker also met with the Rio Community Advisory Committee to update them on projects in their area. He stated that they had a meeting with the County leadership team, where they provided an update on water supply planning efforts, especially in the northern part of the County. He stated that their Safety Manager, George Cheape, did an excellent job by securing a $4,000 safety grant from the Virginia Risk Sharing Association, which was their property insurance company. He stated that the grant allowed them to acquire several safety devices.

Mr. Mawyer stated that they were addressing their Environmental Stewardship strategic plan priority. He stated that students from St. Anne's-Belfield School visited Buck Mountain to assist in the removal of tubes from trees planted many years ago. He stated that these tubes were intended to protect the trees from being eaten by deer. Mr. Mawyer stated that they were transitioning out of a 10-year mitigation program associated with construction of the Ragged Mountain Dam.

Mr. Mawyer stated that they were also planning to proceed with the sale of 1706 Buck Mountain Road property, which included a house and approximately two acres. He stated that they hoped to have the property cleaned and ready for sale by next month, at which point they would issue a Request For Bids in accordance with the Lease and Sale Procedure approved by the Board. He stated that this was the second Buck Mountain property they were selling. This property was previously owned by the Morris family. He stated that Rivanna purchased it in the 1980s, but the family retained a life estate deed. Mr. Mawyer stated that both Mr. and Mrs. Morris had since passed away, and the property was now vacant. He stated that they had communicated with Mrs. Morris's daughter, and residents in the house had moved out. He stated that they were currently cleaning up the property in preparation for sale, although they were still determining the full extent of the work required.

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Mr. Gaffney inquired if the entrance to the property had been moved.

Ms. Long indicated that the public road, Buck Mountain Rd., had been relocated several times and the road was not clearly visible in the photo.

Mr. Mawyer stated that last month, he notified the Board that they were making a change to their corrosion inhibitor program in the urban drinking system. He stated that this program involved a water treatment chemical, known as an orthophosphate product, which was added to the water to prevent metals from leaching from household plumbing and pipes into the drinking water system. He stated that they faced challenges in several neighborhoods, particularly for homes in Glenmore and Farmington, due to precipitate flaking material that was clogging some of the plumbing fixtures. He stated that after many months of lab review, he believed that by slightly reducing the strength of the corrosion inhibitor product, they could eliminate this precipitate from forming.

Mr. Mawyer stated that this change was implemented on September 12. He stated that since then, they observed a decrease in the levels of the orthophosphate product in their system. He stated that they planned to continue testing and taking samples throughout the system to ensure there were no unintended consequences from this change and that it functioned as intended. He stated that it may take some time for the sediment to flush out of homes that were experiencing water problems. He stated that he was hopeful that the precipitate would not return.

Mr. Mawyer stated that he discussed with the Board about starting a commissioning program to help retain experts to ensure their control systems were designed, installed, tested, and operated properly. He stated that they recently issued two commissioning requests. He stated that the first request, due on Thursday, was for utility buildings and facilities, and the second request, due on October 1, was specifically for industrial controls, integration, and the SCADA portion of their control systems. He stated that they were seeking two experts who could help them ensure that their control systems were properly designed, constructed, and inspected.

Mr. Pinkston asked how they disseminated the advertisements.

Mr. Mawyer stated that they advertised on eVA, the state's electronic advertising system, and in the local newspaper. He stated that their website was another platform. He stated that eVA was becoming the primary advertising channel. He stated that they would require bidders to respond and submit their bids through eVA starting in January. He stated that they would inform the Board of who applied, and hopefully, they would have a recommendation to award these contracts next month.

Mr. Mawyer stated that they identified some firms and sent them specific emails to let them know that this had been advertised. He stated that eVA, Rivanna’s website, and local newspapers were their usual platforms. He stated that sometimes they reached out to other professional organizations if they were relevant. He stated that they received bids for the construction contract to install a 24-inch pipe under the South Rivanna River. He stated that the bid for this project was just under $5 M and it was within budget. He stated that a local Charlottesville firm, Faulconer Construction, won the bid as the low bidder. He stated that they recommended

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awarding that contract.

Mr. Mawyer stated that they anticipated receiving construction bids for the project to run a new pipe from Ragged Mountain Reservoir to Observatory Treatment Plant and to construct the major pump station on Reservoir Road on a parcel purchased on the Foxhaven property. He stated that the RFB was issued and bids were due on October 1.

He stated that in the upcoming weeks, they would discuss drought with the Regional Drought Committee. He stated that they anticipated returning to the Board in October to recommend withdrawing the drought watch that had been issued a few months ago. He stated that they had been receiving ample rainfall, and all reservoirs except for Ragged Mountain were full.

Mr. Mawyer stated that if the rain continued, they would continue to fill Ragged Mountain Reservoir through the pipeline from Sugar Hollow, which should take approximately two more months to complete. He stated that Tropical Storm Helene may bring rain to their area. He stated that they were optimistic about addressing the potential drought issue. He stated that they would also consult with the Drought Committee, which included representatives from the City, ACSA, and County.

Mr. Pinkston asked for an update on the Virginia Water Planning ordinance amendment.

Mr. Mawyer stated that they had discussed the amendment with the Board last month, and they had met with ACSA that morning. He stated that they were also going to schedule a meeting with the City to review the amendments, and they planned to make comments to the state through its Town Hall webpage.

Mr. Mawyer stated that these were the amendments to the local water supply planning requirements, and they were supposed to partner with Greene, Louisa, Fluvanna, and Buckingham as a planning unit. He stated that they anticipated submitting comments before the due date of October 9. He stated that they were currently considering the nature of their comments.

Mr. Mawyer stated that DEQ suggested a 30-year planning horizon, but DEQ permits were only for 15 years, and the infrastructure they built had a lifespan of 70 to 100 years. He stated that this raised the question of where this 30-year planning horizon fits in. He stated that it was beyond the permit period but well under the infrastructure's lifespan.

Mr. Pinkston asked if they would be able to provide general or political, community-based feedback. He stated that he had concerns about the expectations that they would be expected to subsidize other localities.

Mr. Mawyer stated that they could make those comments if the Board desired.

Mr. Gaffney stated that hearing that from a City official would be important.

Mr. Mawyer stated that they could coordinate with Mr. Pinkston.

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Ms. Mallek stated that having officials comment directly through the Town Hall link or to DEQ Director Rolband would be effective to share the non-technical view. She stated that she had been struggling with the five attachments that were attached in Town Hall. She stated that some of them were very short, while others were 50 pages long, which she found challenging to manage. She stated that several things had caught her attention while reading them. She stated that the state's recommendation was that this should not impact the locality. She stated she was not certain about the exact costs, but she was aware that there would be significant staff time demands. She stated that this was a concern for her when the state seemed to pass all the costs and work on to the locality.

Mr. Mawyer stated that there was a significant amount of information required by the ordinance amendment. He stated that the ordinance asked for details about current water use for the public system, residential wells, surface water, and groundwater. He stated that it also inquired about future water sources and water use expectations. He stated that they had five years to develop this plan. He stated that they were also determining who would be part of the committee, as it would include stakeholders from environmental, development, and energy groups as well as surrounding localities, and many others. The regional water supply planning groups include cities, counties, and incorporated towns. Our planning group has five incorporated towns: Scottsville, Mineral, Louisa, Dillwyn, and Stanardsville.

Mr. Mawyer stated that ultimately, it would come down to a vote, and although they hoped for unanimous agreement, it was not required. He stated that disagreeing localities could still contribute their comments as part of the plan. He stated that the consensus of the plan would be considered the official local regional water supply plan. He stated that they had been given five years to compile all the necessary information. He stated that DEQ was moving forward with the process and was requesting who would be representing each locality.

Mr. Gaffney asked if Mr. Mawyer would be our planning group representative.

Mr. Mawyer stated that there was an option that the TJPDC could manage this entire process for all of them. He stated that he planned to contact TJPDC to understand their thoughts on this matter and how they wished to participate. He stated that the procedure allowed them to essentially oversee this process for their planning unit.

Mr. Pinkston asked if the TJPDC overlapped the new water planning district.

Mr. Mawyer stated yes. He stated that it was his understanding that they overlapped with all of them, making them eligible to lead this effort. (*UPDATE: Albemarle, Louisa, Greene and Fluvanna are in the TJPDC, while Buckingham is not. The TJPDC also includes Nelson.)

Mr. Gaffney asked if they would have three members.

Ms. Mallek stated that she believed it was very important for each community to do their own thing, especially with the expertise that Rivanna offered. She stated that it was crucial that they did not hand off this responsibility to someone who worked in a more general planning mode

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without having expertise about water. She stated that she urged each of them to delve deeper into this matter.

Ms. Mallek stated that she had forgotten to mention earlier that they had the option to request a different district. She stated that she hoped staff would discuss this with the Rivanna Board at the next meeting and share their thoughts about this. She stated that perhaps a community of interest may be more appropriate. She stated that she believed it was really important that each of their communities stay very actively involved in this.

Mr. Pinkston stated that currently, the TJPDC website displayed a Watershed Implementation Plan (WIP).

Mr. Mawyer stated that the TJPDC organized the Hazard Mitigation Plan for the entire region. He stated that this was part of their responsibility to organize different strategies for the entire region.

Ms. Mallek stated that the WIP was for the Chesapeake Bay Plan, and it operated at a very high level of planning. She stated that it did not provide specific details about what actions were to be taken.

Mr. Pinkston stated that for instance, the TJPDC included Nelson, which was not part of the water planning district, but it did not include Buckingham.

Mr. Mawyer stated that they would sort that out. He stated that they would have five members, best case scenario, representing the City, County, ACSA, Scottsville, and Rivanna.

7. *ITEMS FROM THE PUBLIC*

There were none.

8. *RESPONSES TO PUBLIC COMMENTS*

There were no comments from the public, therefore, there were no responses.

9. *CONSENT AGENDA*

a. *Staff Report on Finance*

b. *Staff Report on Operations*

c. *Staff Report on CIP Projects*

d. *Staff Report on Administration and Communications*

e. *Staff Report on Wholesale Metering*

f. *Staff Report on Drought Monitoring*

g. *Approval of Construction Contract Award; South Fork Rivanna River Crossing 24" Water Main – Faulconer Construction*

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h. Approval To Increase Construction Contingency – MCAWRRF 5kV Electrical Infrastructure Improvements – Pyramid Electrical Contractors

i. Approval of Engineering Services – Rivanna Pump Station Restoration – Hazen and Sawyer Engineer

j. Approval to Increase Design Contingency – MCAWRRF 5kV Electrical Infrastructure Improvements – Hazen and Sawyer Engineers

Mr. Pinkston stated that he wanted to have a quick conversation about Item H and Item I on the Consent Agenda. He stated that it sounded like the MCAWRRF 5kV Electrical Infrastructure Improvements project had been challenging.

Mr. Mawyer stated that they had existing underground duct banks, and the new cables would not go through these duct banks. He stated that as a result, they had to construct new duct banks.

Mr. Marrs stated that there were extensive equipment lead times for this project. He stated that originally, it was supposed to be completed within a year to 18 months. He stated that they were now looking at a three-year timeline before construction was finished. He stated that regarding the duct bank issue, there were a certain number of bends that cable could pass through before it violated electrical code compliance. He stated that these cables were installed in the 1970s.

Mr. Marrs stated that during the cable replacement process, the contractor encountered a problem: the new cable would not pass through the existing duct bank bends without exceeding the maximum pulling tension force allowed for the cables. He stated that to safely replace the cables and complete the job as originally planned, they had to pay the price of replacing the 50-year-old duct bank.

Mr. Pinkston asked how long the installed section of duct bank was.

Mr. Marrs stated that they would need to replace approximately 400 linear feet. He stated that they were collaborating with the contractor to find an alternative alignment that could potentially avoid utility conflicts.

Mr. Pinkston stated that this project appeared to be transformative for the entire complex. He stated that the 5kV system seemed to be the backbone for the plant power system. He asked if Hazen and Sawyer were involved in the original design of the pump station.

Mr. Mawyer stated that they were the design engineers of record. He stated that due to the facility becoming submerged, they had to reassess the damaged components and redesign many aspects of the facility, including equipment, conduit runs, electrical requirements, and communication panels. He stated that regarding the duct penetration in the stairwell, which was the path the water came through, they had not found any indication of a professional responsibility that Hazen and Sawyer would have. He stated that they had not concluded that it was a professional liability issue for which they would have financial responsibility.

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Mr. Pinkston asked for clarification about the other firm (SEH) which was involved.

Mr. Mawyer stated that SEH was not involved in the original design, but they performed the independent assessment of what went wrong. He stated that they had expertise in controls and were the ones hired to complete the design of new controls.

Mr. Pinkston asked who did the controls last time.

Mr. Mawyer stated that Hazen and Sawyer did it.

Mr. Chris Taber, Vice President of Hazen and Sawyer, stated that the project had been completed a few years ago. He stated that it involved all the controls and details identified in the specification, which served as the functional description. He stated that this information had been utilized by the engineer who had handled the integration design at that time. He stated that he believed that the work had been done in-house. He stated that this information was now being used by SEH to assist in developing their updated controls design and associated documentation.

Mr. Pinkston asked if it was going to be essentially like pulling the brains out and putting a new one in, similar to a Frankenstein-style operation, or if it would be a code change.

Mr. Taber stated that there were different types of sensors they could use. He stated that there was a separate task order that SEH was working under.

Mr. Mawyer stated that they previously had floats on the wires, which might have gotten tangled during the water submergence. He stated that this time they were exploring use of a static bar that would read the water level as it rose. He stated that this design ensured that it could not float away or get tangled.

Mr. Pinkston asked for an update on the forensics.

Mr. Mawyer stated that they had completed a report stating that it was a control malfunction. He stated that the controls were not instructing the pumps to operate at a rate fast enough to keep up with the inflow. He stated that there was a blanking zone where the electronic controls could not accurately read the water level when it became too high, leading to erroneous information being provided to the operators.

Mr. Pinkston asked if the integration would be done by a subcontractor.

Mr. Mawyer stated that usually, they had a specialty subcontractor that completed the controls. He stated that they planned to have a firm to help with this process.

Mr. Schiller stated that SEH will be the controls design consultant and also do the control programming on this project.

Mr. Gaffney asked if the insurance issue had been resolved.

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Mr. Mawyer stated that they had not received any official communication from them yet. He stated that they were still awaiting a response, but all signs indicated that they were open to paying for the damage. He stated that this did not include the cost of new improvements.

Mr. Pinkston moved the Board to approve the Consent Agenda. Ms. Hildebrand seconded the motion, which passed unanimously (5-0). (Ms. Mallek was remote; Mr. Richardson and Mr. Sanders were absent)

10. *OTHER BUSINESS*

(Combined Session with the RSWA)

a. *Presentation: Safety Program Update*
   George Cheape, Safety Manager

George Cheape, Safety Manager, stated that he had assumed this role in December 2023 and had been with the company for just over six years. He stated that his initial role was as a Engineering Project Inspector. He stated that he transitioned into this position primarily due to his extensive background. He stated that he had accumulated approximately 35 years of construction experience, with over 29 years specializing in water and wastewater. He stated that he held a Class 2 Operator certification in both water and wastewater.

Mr. Cheape stated that he had significant experience in maintenance and held Master Electrician and Master Plumber licenses. He stated that he had also been previously certified and was currently working towards recertification as an instructor trainer for OSHA 10 and OSHA 30. He stated that his involvement with Rivanna began when he was an adjunct professor at PVCC. He stated that Rivanna required OSHA training, which led to his introduction to the Authority.

Mr. Cheape stated that his vision was to cultivate a culture of safety through building relationships with others. He stated that it was not just about office work; it was about being present. He stated that their goal was for all Rivanna personnel and contractors to think and practice safety at all times, making it an automatic process. He stated that they had a strong culture of safety at Rivanna, and his goal was to enhance it further.

Mr. Cheape stated that he preferred a hands-on, helpful approach rather than pointing out mistakes. He stated that he believed in being present in various departments and job sites, engaging in conversations with their staff and contractors, and building relationships to improve safety. He stated that effective communication was key to accomplishing tasks efficiently and safely. He stated that while enforcing safety standards was necessary, he aimed to focus on positive conversations about how they could make their work environment safer. He stated that their ultimate goal was zero accidents, ensuring everyone went home safely.

Mr. Cheape stated that safety was a continuous improvement process that protected their staff and reduced workplace incidents. He stated that it was an integral part of their strategic plan, and they aimed to set safety goals and strategies through site visits and communication with their

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team. He stated that he wanted to expand their safety initiatives, offering more to their staff and the public through a commitment to a growing culture of safety. He stated that all of their staff were dedicated to fostering a safety culture.

Mr. Cheape stated that from the very beginning, he had been actively involved in the field making site visits. He stated that he also spent time in the office. He stated that he had been visiting with the Rivanna Solid Waste Authority, Rivanna Water and Sewer Authority, and Maintenance and Operations in the field. He stated that he communicated with different departments, attended safety meetings, and asked questions. He stated that he also ensured that employees were safe when working in hot conditions.

Mr. Cheape stated that his current role with the pump station involved ongoing safety coordination for the rehabilitation. He stated that he would attend a Safety Committee meeting the next day, which was a pre-conference for load testing the VFDs to ensure their reliability. He stated that they had experienced some failures with the primary clarifiers recently, which served as a prime example of collaborating with people to find unique solutions. He stated that these clarifiers were approximately 110 feet in diameter and 10 feet deep, making them a permit-required confined space.

Mr. Cheape stated that he had worked with the Maintenance Manager, Greg Marrs, and their maintenance team to develop a safe method for accessing these clarifiers, and they had successfully achieved this on both clarifiers. He stated that he also conducted site safety inspections at their CIP sites, including the Airport Road Pump Station, South Rivanna and Observatory WTPS, and the 5kV project.

Mr. Cheape stated that the pump station incident occurred approximately three weeks into his new role. He stated that he had been performing a dual role as an inspector, inspecting the emergency bypass installation, while also collaborating with Rivanna staff, consulting engineers, and contractors to ensure the safe installation of additional pumps and piping. He stated that this included designing an effective fall protection system for workers who would be working at heights.

Mr. Cheape stated that he worked to ensure the drywell areas were safe for entrance to perform the initial analysis and inspection. He stated that he coordinated with contractors to get the drywell cleaned and disinfected. He stated that one of the achievements that year was that VRSA had a safety grant system. He stated that they had qualified for a $4,000 safety grant for Rivanna Water and Sewer Authority. He stated that they had successfully obtained all $4,000 of that. He stated that they had standardized their vests, purchasing 43 Class III high-visibility vests company-wide. He stated that they were also acquiring three new gas monitors for the maintenance department, and six chemical rain suits for wastewater.

Mr. Cheape stated that for Solid Waste, he had collaborated with David Rhoades, the Solid Waste Manager, to apply a $2,000 grant. He stated that they developed a project aimed to protect their employees on the tipping floor by installing a specialized gate. He stated that he had confirmed with VRSA that the $2,000 grant could be applied to this project, enhancing employee safety while cleaning the tipping floor. He stated that they had created a new Electrical Safety

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chapter for the Safety Manual, which was the first of its kind in their safety manual. He stated that he had collaborated with UVA Facilities Management for this initiative, and they had been very helpful. He stated that the chapter was nearly complete and had been finalized and published.

Mr. Cheape stated that in addition to attending meetings with CUA 911, the City of Charlottesville, ACSA, and others, he had been actively building relationships and participating in various activities. He stated that the safety manual consisted of 25 chapters. He stated that the manual was expected to continue expanding as they progressed.

Mr. Cheape stated that one of the things he was particularly excited about was the upcoming rollout of a new incident reporting system in the fourth quarter of this year. He stated that their current incident reporting system had been primarily paper-based, but they had been collaborating with different stakeholders, including IT and HR, to integrate it with their existing Paychex employee payroll system, which is also used for safety training.

Mr. Cheape stated that this integration would enable every employee to have incident reporting readily available on their phone, allowing them to document incidents. He stated that this approach would not only make incident reporting more accessible but also enhance their data collection capabilities, enabling them to focus on specific injuries or incident types. He stated that they were developing a comprehensive lockout/tagout program to comply with OSHA requirements. He stated that this program would be incorporated into their CityWorks asset management program, and they were working on streamlining forms and systems for review and approval.

Mr. Pinkston asked what they had been historically doing for lockout/tagout.

Mr. Cheape stated that they were currently implementing lockout/tagout procedures. He stated that although they had always performed this work, they were now documenting their actions and establishing procedures to ensure that every new employee would know how to secure equipment. He stated that he would attend all pre-construction meetings related to projects, focusing on safety. He stated that he would also conduct on-site safety inspections and collaborate with construction inspectors to develop safety guidelines for these jobs.

Mr. Mawyer stated that they had a position in the proposed budget for July to add another safety person to assist Mr. Cheape and to focus on Solid Waste. He stated that this was a topic that had been mentioned by the Solid Waste Board several years ago. He stated that they expressed a desire for a more dedicated safety resource, which they may discuss further in the spring.

11. *OTHER ITEMS FROM BOARD/STAFF NOT ON AGENDA*

There were no items to discuss.

12. *CLOSED MEETING*

There was no reason for a closed meeting.

13. *ADJOURNMENT*

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At 3:18 p.m., Mr. Pinkston moved to adjourn the meeting of the Rivanna Water and Sewer Authority. Ms. Hildebrand seconded the motion, which passed unanimously (5-0). (Ms. Mallek was remote; Mr. Richardson and Mr. Sanders were absent)

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RIVANNA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS

Resolution of Appreciation for Robert Haacke

WHEREAS, Mr. Haacke has served in the Wastewater Department in various positions including Wastewater Operator, Assistant Wastewater Manager, and Wastewater Manager, for the Rivanna Water and Sewer Authority for 35 years; and

WHEREAS, over the same period of 35 years, Mr. Haacke has demonstrated leadership in his field and has been a valuable resource to the Authority and its employees; and

WHEREAS, Mr. Haacke's understanding of the Authority's operation and dedication and loyalty to the Authority has positively impacted the Authority, its customers, and its employees; and

WHEREAS, Mr. Haacke's understanding of the wastewater operations of the Water & Sewer Authority has supported a strategic decision-making process that provided benefits to the customers served by the City of Charlottesville and the Albemarle County Service Authority as well as the community as a whole. Through the leadership and skillful support of Mr. Haacke, major treatment process improvements were implemented during his tenure including:

- A high strength waste program sampling program to protect the treatment stream
- Aeration basin ammonia control to optimize the air blowers creating an estimated savings of more than 15% on air blower electric expense
- Optimization of the sodium hydroxide feed program for long-term savings

NOW, THEREFORE, BE IT RESOLVED that the Rivanna Water and Sewer Authority Board of Directors recognizes, thanks, and commends Mr. Haacke for his distinguished service, efforts, and achievements as a member of the Rivanna Water and Sewer Authority, and presents this Resolution as a token of esteem, with its best wishes in his retirement.

BE IT FURTHER RESOLVED that this Resolution be entered upon the permanent Minutes of the Rivanna Water and Sewer Authority.

Michael Gaffney, Chairman
Lauren Hildebrand
Ann Mallek
Quin Lunsford
Brian Pinkston
Jeff Richardson
Sam Sanders

RIVANNA WATER & SEWER AUTHORITY
695 Moores Creek Lane | Charlottesville, Virginia 22902-9016
434.977.2970
434.293.8858
www.rivanna.org

MEMORANDUM

TO: **RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS**

FROM: **BILL MAWYER, EXECUTIVE DIRECTOR**

SUBJECT: **EXECUTIVE DIRECTOR'S REPORT**

DATE: **OCTOBER 22, 2024**

STRATEGIC PLAN PRIORITY: EMPLOYEE DEVELOPMENT

Higher Licenses for Team Members

The professional credentials of our staff continue to improve and enhance our services. We congratulate the following employees for successfully completing the requirements for a higher license from the State:

- Dennis Barbieri – Wastewater Operator Class 1
- Dylan Schweickert – Water Operator Class 2
- Johanna Vaughan – Water Operator Class 2

STRATEGIC PLAN PRIORITY: COMMUNICATION AND COLLABORATION

Delegate Katrina Callsen

On October 1st, we provided a windshield tour and virtual presentation to Delegate Katrina Callsen, 54th District Virginia House of Representatives and Jason Melendez, Legislative Director, along with RWSA Board Chair, Mike Gaffney.

Earlier in the summer we invited our elected federal and state officials to visit our facilities, and we're glad Delegate Callsen was available to join us. We appreciate this opportunity to share information about our organization, services, programs, and our current and planned major water supply projects.

House of Representatives – H. R. Bill 7944

We sent letters to Speaker Johnson and Congressman Good on September 30th, asking for support of H.R. 7944, Water Systems Per- and Polyfluoroalkyl Substances (PFAS) Liability Protection Act. The bill provides some specific liability exemptions for water and wastewater systems to ensure that polluters, not ratepayers, are held financially responsible for PFAS contamination under the Comprehensive Environmental Response, Compensation, and Liability Act.

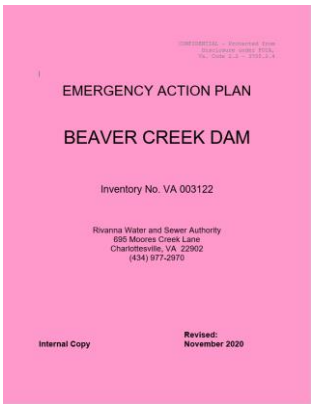
Virginia Regulatory Town Hall

Comments were submitted on-line through the Virginia Regulatory "Town Hall" web site regarding the proposed Amendments to the Local and Regional Water Supply Planning Regulations. Each local government and water authority within the regional planning area is required to provide contact information for a Regional Planning Area Representative, and an alternate representative, to DEQ by

December 8, 2024. Regional Planning Unit kickoff meetings are required to occur prior to **April 7, 2025**. We will coordinate with local governments, ACSA and the TJPDC to establish a list of Representatives for our area.

Regional Dam Tabletop Exercises

Victoria Fort, Senior Civil Engineer, conducted a Tabletop Emergency Training Exercise for the Beaver Creek and Sugar Hollow Dams on October 10th at the Cityspace facility with many of our community emergency response partners. We were pleased to have participants from local, state, and federal agencies join RWSA staff for this important training event. "Thank you" goes out to Victoria and the Engineering Department for this important training event.


EMERGENCY ACTION PLAN

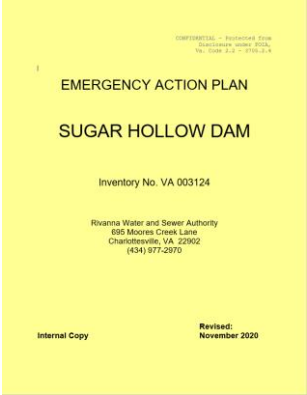
BEAVER CREEK DAM

Inventory No. VA 003122

Rivanna Water and Sewer Authority
695 Moores Creek Lane
Charlottesville, VA 22902
(434) 977-2970

Internal Copy

Revised:
November 2020


EMERGENCY ACTION PLAN

SUGAR HOLLOW DAM

Inventory No. VA 003124

Rivanna Water and Sewer Authority
695 Moores Creek Lane
Charlottesville, VA 22902
(434) 977-2970

Internal Copy

Revised:
November 2020

Imagine A Day Without Water

The City of Charlottesville, Albemarle County Service Authority, and Rivanna Water & Sewer Authority are holding their 10th annual **Imagine a Day without Water Art Contest**. The contest is open to all youth in grades K – 12th in the City of Charlottesville and Albemarle County. This year's theme is "What's Your Drop in the Bucket" and artwork is being accepted now **through October 28th**. More information: **HERE**

October is Breast Cancer Awareness Month

Michelle Simpson, Senior Civil Engineer, encouraged us to show our support for those who have been affected by breast cancer during Breast Cancer Awareness Month. On October 16th our staff wore pink shirts to work to express their support for fellow team members and the community.

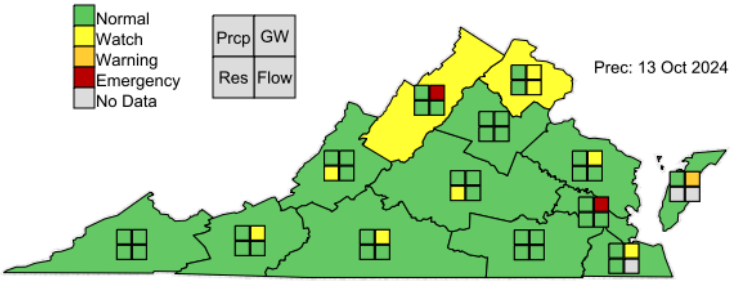
STRATEGIC PLAN PRIORITY: PLANNING AND INFRASTRUCTURE

Sugar Hollow Pipe

As a result of Tropical Storm Helene, an elevated section of 18-inch cast iron pipe over the Mechums River was damaged. This circa 1920s pipe is used to transfer raw water from the Sugar Hollow Reservoir to Ragged Mountain Reservoir. Repairs will be completed by the end of the year.

STRATEGIC PLAN PRIORITY: ENVIRONMENTAL STEWARDSHIP

Drought Update



Our area received more than nine inches of rain in September which has replenished the storage capacity of our reservoirs and flows in local streams. After discussion with the Regional Drought Committee and Chairman Gaffney, the "Drought Watch" was lifted on October 2, 2024. The Virginia Drought Monitoring Task Force also issued an update which indicated our area is no longer in "Drought Watch" status.

STRATEGIC PLAN PRIORITY: OPTIMIZATION AND RESILIENCY

Regulatory Actions

South Rivanna Water Treatment Plant

We reported to the Board in November 2023 about a chemical release (liquid lime) which occurred at the South Rivanna WTP in the early morning of November 2 due to several operational noncompliances. Approximately 1200 gallons of liquid lime exited the lime storage building, entered the storm sewer system, and discharged into the South Fork Rivanna River below the dam. We have worked with VDEQ since the incident and have implemented measures to prevent future occurrences including staff training, instructional signs and lockout – tagout devices. We resolved this violation for an unauthorized discharge by accepting the terms of VDEQ's Consent Order which required the following payments:

$14,353.47 Civil Charge

$ 1,643.24 Fish Investigation

$ 420.75 Fish Replacement

Rivanna Wastewater Pump Station

We reported to the Board in January 2024 that a pumping malfunction at the Rivanna Pump Station made it was necessary to bypass the pumping station and discharge untreated wastewater into Moores Creek on January 18th and 19th to dewater the pump station and proceed with repairs. Our Operations Division contacted DEQ with advance notice before initiating the bypass and discharge and provided frequent, detailed reports to update DEQ on the bypass and restoration process. On October 10th, we received a determination from VDEQ which authorized the bypass after considering its adverse effects and determining that the bypass met the conditions of our permit. I want to thank Dave Tungate, Director of Operations and his staff, as well as our attorney, "Speaker" Pollard with Williams Mullen, for their efforts in resolving this matter.

Fluoridation of Drinking Water

As a result of a lawsuit in California, a federal judge has ordered the Environmental Protection Agency (EPA) to further regulate fluoride in drinking water. A recent study showed an association between levels of fluoride higher than 1.5mg/L and lower IQ in children.

Currently, the EPA has an enforceable drinking water standard of 4.0 mg/L, and a non-enforceable secondary standard of 2.0 mg/L. The Virginia Department of Health (VDH) recommends a level of 0.7 mg/L of fluoride in drinking water. RWSA complies with the VDH recommended fluoridation level (0.7 mg/L). We will monitor this evolving issue and adjust if new regulations from EPA and VDH and EPA are released.

The American Dental Association website indicates:

- Fluoridation of community water supplies is the single most effective public health measure to prevent tooth decay.
- Throughout more than 70 years of research and practical experience, the overwhelming weight of credible scientific evidence has consistently indicated that fluoridation of community water supplies is safe.
- Studies prove water fluoridation continues to be effective in reducing tooth decay by more than 25% in children and adults, even in an era with widespread availability of fluoride from other sources, such as fluoride toothpaste.
- Because of the important role it has played in the reduction of tooth decay, the Centers for Disease Control and Prevention has proclaimed community water fluoridation (along with vaccinations and infectious disease control) one of the ten great public health achievements of the 20th century.

RIVANNA WATER & SEWER AUTHORITY
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MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS

FROM: LONNIE WOOD, DIRECTOR OF FINANCE AND INFORMATION TECHNOLOGY

REVIEWED: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: AUGUST MONTHLY FINANCIAL SUMMARY – FY 2025

DATE: OCTOBER 22, 2024

Financial Snapshot

The Authority's actual operating revenues for the first two months of this fiscal year are $1,123,800 over the prorated annual budget estimates, and operating expenses are over the prorated budget by $1,541,100, resulting in an operating deficit of $70,100. Urban Water flows and operating rate revenue through August are 16.2% over budget estimates. Urban Wastewater flows and operations rate revenue are just 1.4% under budget, but that shortfall is currently offset by Septage receiving support revenue of $109,440 billed to Albemarle County in July.

Total revenues are $1,157,900 over budget estimates, but total expenses are $1,483,100 over budget, resulting in a slight overall deficit of $22,200 through August. Revenues and expenses are summarized in the table below:

	Urban Water	Urban Wastewater	Total Other Rate Centers	Total Authority
Operations				
Revenues	$ 2,257,168	$ 2,033,595	$ 529,239	$ 4,820,002
Expenses	(2,383,871)	(1,954,375)	(551,872)	(4,890,118)
Surplus (deficit)	$ (126,703)	$ 79,220	$ (22,633)	$ (70,116)
Debt Service				
Revenues	$ 2,228,594	$ 1,932,577	$ 496,873	$ 4,658,044
Expenses	(2,228,250)	(1,840,689)	(496,764)	(4,565,703)
Surplus (deficit)	$ 344	$ 91,888	$ 109	$ 92,341
Total				
Revenues	$ 4,485,762	$ 3,966,172	$ 1,026,112	$ 9,478,046
Expenses	(4,612,121)	(3,795,064)	(1,048,636)	(9,455,821)
Surplus (deficit)	$ (126,359)	$ 171,108	$ (22,524)	$ 22,225

A more detailed financial analysis is in the following monthly report and reviews more closely actual financial performance compared to budgeted estimates. There are comments listed that will reference to the applicable line items in the financial statement for each rate center and each

support department in the following pages. Please refer to the Budget vs Actual financial statements when reviewing these comments.

Detailed Financials

The following comments help explain most of the other budget vs. actual variances.

A. Annual and Quarterly Transactions - Some revenues and expenses exceed the prorated annual budget due to up-front annual receipts of revenue and quarterly or annual payments of expenses. These transactions appear to significantly impact the budget vs. actual monthly comparisons, but they usually even out as the year progresses. Septage receiving support revenue of $109,440 is billed to the County annually in July. Annual payments are made at the beginning of the fiscal year for certain maintenance agreements and for employer contributions to employees' health savings accounts. The annual payment of $175,000 to UVA for the Observatory lease is made in August. Insurance premiums are paid at the beginning of each quarter.
B. Personnel Costs (most departments – pages 2-11) – The prorated budget amounts through August are calculated as 2/12 (or 16.67%) of the annual budget on these financial statements. However, actual payroll is paid biweekly, and there have been 5 out of 26 total pay periods through August (or 19.23%). This affects the comparison of budget vs. actual payroll costs. Urban Water's salaries are also higher than budgeted due to the loss of spill at the South Rivanna Dam and the transition to extra operations at Observatory WTP.
C. Professional Services (Urban Water, Administration, Finance & IT – pages 2, 7, 8) – Urban Water is over the prorated budget for engineering and technical services for Glenmore and UVA, and the Administration Department is currently $13,000 over budget in this category for web page design services. Bond issuance costs totaling $713,500 have been incurred through August, when the Authority issued Bond 2024B to fund various water and wastewater capital projects and $743,300 in bond issuance costs.
D. Other Services & Charges (Urban Water, Urban Wastewater, Administration – pages 2, 5, 7) – Urban Water paid $20,000 to Rivanna Conservation Alliance in August for water quality monitoring services for the year. Urban Wastewater is currently over the monthly budget for Crozet Pump Station odor control costs. The Administration departments is $19,000 over budget for executive director recruiting expenses.
E. Operations & Maintenance (Urban Water – page 2) – Urban Water is currently $98,000 over the prorated budget for chemicals due to a carbon exchange at South Rivanna WTP and $175,000 annual rent was paid to UVA in August as mentioned in section A.

Rivanna Water & Sewer Authority
Monthly Financial Statements - August 2024
Fiscal Year 2025

Consolidated Revenues and Expenses Summary

Operating Budget vs. Actual

	Notes	Budget FY 2025	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues						
Operations Rate Revenue		$ 25,533,965	$ 4,255,661	$ 4,538,514	$ 282,853	6.65%
Lease Revenue		120,000	20,000	23,875	3,875	19.37%
Admin., Finance/IT, Maint. & Engineering Revenue		905,200	150,867	869,141	718,274	476.10%
Other Revenues		667,768	111,295	201,177	89,882	80.76%
Use of Reserves (Water Resources Fund)		-	-	-	-	
Interest Allocation		165,400	27,567	56,438	28,871	104.73%
Total Operating Revenues		**$ 27,392,333**	**$ 4,565,389**	**$ 5,689,144**	**$ 1,123,756**	**24.61%**
Expenses						
Personnel Cost	**A,B**	$ 12,816,065	$ 1,788,765	$ 2,496,263	$ (707,498)	-39.55%
Professional Services	**C**	492,650	82,108	856,722	(774,613)	-943.40%
Other Services & Charges	**D**	4,371,588	728,598	784,900	(56,302)	-7.73%
Communication		244,950	40,825	50,503	(9,678)	-23.71%
Information Technology		1,470,050	245,008	170,945	74,064	30.23%
Supplies		51,200	8,533	9,443	(910)	-10.66%
Operations & Maintenance	**A,E**	6,698,884	1,116,481	1,187,098	(70,617)	-6.32%
Equipment Purchases		316,950	52,825	48,386	4,439	8.40%
Depreciation		930,000	155,000	155,000	-	0.00%
Total Operating Expenses		**$ 27,392,337**	**$ 4,218,143**	**$ 5,759,260**	**$ (1,541,117)**	**-36.54%**
Operating Surplus/(Deficit)		**$ (4)**	**$ 347,246**	**$ (70,115)**		

Debt Service Budget vs. Actual

Revenues					
Debt Service Rate Revenue	$ 25,612,554	$ 4,268,759	$ 4,268,760	$ 1	0.00%
Septage Receiving Support - County	109,440	18,240	109,440	91,200	500.00%
Buck Mountain Lease Revenue	10,000	1,667	1,403	(264)	-15.85%
Trust Fund Interest	430,300	71,717	72,982	1,266	1.76%
Reserve Fund Interest	1,580,800	263,467	205,458	(58,009)	-22.02%
Total Debt Service Revenues	**$ 27,743,094**	**$ 4,623,849**	**$ 4,658,043**	**$ 34,194**	**0.74%**
Debt Service Costs					
Total Principal & Interest	$ 16,164,506	$ 2,694,084	$ 3,191,378	$ (497,293)	-18.46%
Reserve Additions-Interest	1,580,800	263,467	205,458	58,009	22.02%
Debt Service Ratio Charge	725,000	120,833	120,833	-	0.00%
Reserve Additions-CIP Growth	9,271,960	1,545,327	1,048,034	497,293	32.18%
Total Debt Service Costs	**$ 27,742,266**	**$ 4,623,711**	**$ 4,565,702**	**$ 58,009**	**1.25%**
Debt Service Surplus/(Deficit)	**$ 828**	**$ 138**	**$ 92,341**		

Summary

Total Revenues	$ 55,135,427	$ 9,189,238	$ 10,347,187	$ 1,157,949	12.60%
Total Expenses	55,134,603	8,841,854	10,324,962	(1,483,108)	-16.77%
Surplus/(Deficit)	**$ 824**	**$ 347,384**	**$ 22,225**		

Rivanna Water & Sewer Authority
Monthly Financial Statements - August 2024

Urban Water Rate Center
Revenues and Expenses Summary

Operating Budget vs. Actual

	Notes	Budget FY 2025	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues						
Operations Rate Revenue		$ 11,425,341	$ 1,904,224	$ 2,212,763	$ 308,540	16.20%
Lease Revenue		90,000	15,000	18,324	3,324	22.16%
Miscellaneous		-	-	1,700	1,700	
Use of Reserves (Water Resources Fund)		-	-		-	
Interest Allocation		71,500	11,917	24,381	12,464	104.60%
Total Operating Revenues		**$ 11,586,841**	**$ 1,931,140**	**$ 2,257,168**	**$ 326,028**	**16.88%**
Expenses						
Personnel Cost	**A,B**	$ 2,570,828	$ 428,471	$ 555,692	$ (127,221)	-29.69%
Professional Services	**C**	177,000	29,500	86,722	(57,222)	-193.97%
Other Services & Charges	**D**	1,076,746	179,458	197,685	(18,227)	-10.16%
Communications		89,700	14,950	19,081	(4,131)	-27.63%
Information Technology		109,400	18,233	6,828	11,405	62.55%
Supplies		7,900	1,317	2,228	(911)	-69.19%
Operations & Maintenance	**A,E**	3,334,814	555,802	785,999	(230,196)	-41.42%
Equipment Purchases		23,300	3,883	5,203	(1,320)	-33.98%
Depreciation		300,000	50,000	50,000	-	0.00%
Subtotal Before Allocations		$ 7,689,688	$ 1,281,615	$ 1,709,437	$ (427,823)	-33.38%
Allocation of Support Departments		3,897,153	653,357	674,434	(21,077)	-3.23%
Total Operating Expenses		**$ 11,586,841**	**$ 1,934,972**	**$ 2,383,871**	**$ (448,899)**	**-23.20%**
Operating Surplus/(Deficit)		**$ 0**	**$ (3,832)**	**$ (126,703)**		

Debt Service Budget vs. Actual

Revenues					
Debt Service Rate Revenue	$ 12,593,874	$ 2,098,979	$ 2,098,980	$ 1	0.00%
Trust Fund Interest	185,000	30,833	31,441	607	1.97%
Reserve Fund Interest	744,800	124,133	96,771	(27,363)	-22.04%
Lease Revenue	10,000	1,667	1,403	(264)	-15.85%
Total Debt Service Revenues	**$ 13,533,674**	**$ 2,255,612**	**$ 2,228,594**	**$ (27,018)**	**-1.20%**
Debt Service Costs					
Total Principal & Interest	$ 7,078,274	$ 1,179,712	$ 1,365,700	$ (185,988)	-15.77%
Reserve Additions-Interest	744,800	124,133	96,771	27,363	22.04%
Debt Service Ratio Charge	400,000	66,667	66,667	-	0.00%
Est. New Debt Service - CIP Growth	5,310,600	885,100	699,112	185,988	21.01%
Total Debt Service Costs	**$ 13,533,674**	**$ 2,255,612**	**$ 2,228,250**	**$ 27,363**	**1.21%**
Debt Service Surplus/(Deficit)	**$ -**	**$ -**	**$ 344**		

Rate Center Summary

Total Revenues	$ 25,120,515	$ 4,186,753	$ 4,485,762	$ 299,010	7.14%
Total Expenses	25,120,515	4,190,584	4,612,121	(421,537)	-10.06%
Surplus/(Deficit)	**$ 0**	**$ (3,832)**	**$ (126,359)**		
Costs per 1000 Gallons	$ 3.41		$ 3.62		
Operating and DS	$ 7.39		$ 7.01		
Thousand Gallons Treated	3,397,700	566,283	657,973	91,690	16.19%
or					
Flow (MGD)	9.309		10.612		

Rivanna Water & Sewer Authority
Monthly Financial Statements - August 2024

Crozet Water Rate Center
Revenues and Expenses Summary

Operating Budget vs. Actual

	Notes	Budget FY 2025	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues						
Operations Rate Revenue		$ 1,420,644	$ 236,774	$ 236,774	$ -	0.00%
Lease Revenues		30,000	5,000	5,551	551	11.02%
Interest Allocation		8,900	1,483	3,048	1,564	105.46%
Total Operating Revenues		**$ 1,459,544**	**$ 243,257**	**$ 245,372**	**$ 2,115**	**0.87%**
Expenses						
Personnel Cost	**B**	$ 365,428	$ 60,905	$ 77,060	$ (16,156)	-26.53%
Professional Services		22,900	3,817	1,812	2,005	52.53%
Other Services & Charges		163,107	27,185	27,408	(223)	-0.82%
Communications		19,000	3,167	3,748	(581)	-18.35%
Information Technology		35,000	5,833	662	5,171	88.64%
Supplies		1,600	267	850	(584)	-218.88%
Operations & Maintenance		426,600	71,100	59,762	11,338	15.95%
Equipment Purchases		3,300	550	550	-	0.00%
Depreciation		60,000	10,000	10,000	-	0.00%
Subtotal Before Allocations		$ 1,096,935	$ 182,822	$ 181,853	$ 970	0.53%
Allocation of Support Departments		362,608	60,783	62,845	(2,062)	-3.39%
Total Operating Expenses		**$ 1,459,543**	**$ 243,605**	**$ 244,698**	**$ (1,093)**	**-0.45%**
Operating Surplus/(Deficit)		**$ 1**	**$ (348)**	**$ 674**		

Debt Service Budget vs. Actual

Revenues					
Debt Service Rate Revenue	$ 2,590,368	$ 431,728	$ 431,728	$ -	0.00%
Trust Fund Interest	32,400	5,400	5,496	96	1.77%
Reserve Fund Interest	93,800	15,633	12,122	(3,511)	-22.46%
Total Debt Service Revenues	**$ 2,716,568**	**$ 452,761**	**$ 449,346**	**$ (3,416)**	**-0.75%**
Debt Service Costs					
Total Principal & Interest	$ 1,131,172	$ 188,529	$ 188,529	$ -	0.00%
Reserve Additions-Interest	93,800	15,633	12,122	3,511	22.46%
Estimated New Principal & Interest	1,491,600	248,600	248,600	-	0.00%
Total Debt Service Costs	**$ 2,716,572**	**$ 452,762**	**$ 449,251**	**$ 3,511**	**0.78%**
Debt Service Surplus/(Deficit)	**$ (4)**	**$ (1)**	**$ 95**		

Rate Center Summary

Total Revenues	$ 4,176,112	$ 696,019	$ 694,718	$ (1,301)	-0.19%
Total Expenses	4,176,115	696,367	693,949	2,418	0.35%
Surplus/(Deficit)	**$ (3)**	**$ (349)**	**$ 769**		
Costs per 1000 Gallons	$ 7.20		$ 5.35		
Operating and DS	$ 20.60		$ 15.18		
Thousand Gallons Treated	202,697	33,783	45,700	11,917	35.28%
Flow (MGD)	0.555		0.737		

Rivanna Water & Sewer Authority
Monthly Financial Statements - August 2024

Scottsville Water Rate Center
Revenues and Expenses Summary

Operating Budget vs. Actual

	Notes	Budget FY 2025	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues						
Operations Rate Revenue		$ 741,984	$ 123,664	$ 123,664	$ -	0.00%
Interest Allocation		4,600	767	1,580	814	106.12%
Total Operating Revenues		**$ 746,584**	**$ 124,431**	**$ 125,244**	**$ 814**	**0.65%**
Expenses						
Personnel Cost		$ 239,452	$ 39,909	$ 47,959	$ (8,050)	-20.17%
Professional Services		5,000	833	521	313	37.51%
Other Services & Charges		68,490	11,415	8,161	3,254	28.51%
Communications		7,000	1,167	4,148	(2,982)	-255.57%
Information Technology		13,400	2,233	11,124	(8,890)	-398.08%
Supplies		200	33	839	(806)	-2417.45%
Operations & Maintenance		154,600	25,767	10,865	14,901	57.83%
Equipment Purchases		2,200	367	538	(172)	-46.80%
Depreciation		40,000	6,667	6,667	0	0.00%
Subtotal Before Allocations		$ 530,342	$ 88,390	$ 90,822	$ (2,432)	-2.75%
Allocation of Support Departments		216,247	36,215	37,516	(1,301)	-3.59%
Total Operating Expenses		**$ 746,589**	**$ 124,606**	**$ 128,339**	**$ (3,733)**	**-3.00%**
Operating Surplus/(Deficit)		**$ (5)**	**$ (175)**	**$ (3,094)**		

Debt Service Budget vs. Actual

Revenues						
Debt Service Rate Revenue		$ 190,416	$ 31,736	$ 31,736	$ -	0.00%
Trust Fund Interest		4,000	667	671	5	0.72%
Reserve Fund Interest		7,000	1,167	1,027	(139)	-11.95%
Total Debt Service Revenues		**$ 201,416**	**$ 33,569**	**$ 33,435**	**$ (135)**	**-0.40%**
Debt Service Costs						
Total Principal & Interest		$ 148,815	$ 24,803	$ 24,803	$ -	0.00%
Reserve Additions-Interest		7,000	1,167	1,027	139	11.95%
Estimated New Principal & Interest		45,600	7,600	7,600	-	0.00%
Total Debt Service Costs		**$ 201,415**	**$ 33,569**	**$ 33,430**	**$ 139**	**0.42%**
Debt Service Surplus/(Deficit)		**$ 1**	**$ 0**	**$ 5**		

Rate Center Summary

Total Revenues	$ 948,000	$ 158,000	$ 158,679	$ 679	0.43%
Total Expenses	948,004	158,175	161,768	(3,594)	-2.27%
Surplus/(Deficit)	**$ (4)**	**$ (175)**	**$ (3,090)**		
Costs per 1000 Gallons	$ 43.33		$ 35.35		
Operating and DS	$ 55.02		$ 44.55		
Thousand Gallons Treated	17,230	2,872	3,631	759	26.44%
or					
Flow (MGD)	0.047		0.059		

Rivanna Water & Sewer Authority
Monthly Financial Statements - August 2024

Urban Wastewater Rate Center
Revenues and Expenses Summary

Operating Budget vs. Actual

	Notes	Budget FY 2025	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues						
Operations Rate Revenue		$ 11,007,464	$ 1,834,577	$ 1,808,891	$ (25,687)	-1.40%
Stone Robinson WWTP		17,768	2,961	2,024	(938)	-31.66%
Septage Acceptance		600,000	100,000	88,648	(11,352)	-11.35%
Nutrient Credits		50,000	8,333	108,805	100,471	1205.66%
Miscellaneous Revenue		-	-	-	-	
Interest Allocation		74,000	12,333	25,228	12,894	104.55%
Total Operating Revenues		**$ 11,749,232**	**$ 1,958,205**	**$ 2,033,595**	**$ 75,390**	**3.85%**
Expenses						
Personnel Cost	**A,B**	$ 1,615,345	$ 269,224	$ 324,838	$ (55,614)	-20.66%
Professional Services		35,000	5,833	3,350	2,483	42.57%
Other Services & Charges	**D**	2,721,750	453,625	488,518	(34,893)	-7.69%
Communications		14,800	2,467	2,018	449	18.19%
Information Technology		95,500	15,917	15,351	566	3.55%
Supplies		2,600	433	135	298	68.74%
Operations & Maintenance		2,190,500	365,083	242,980	122,104	33.45%
Equipment Purchases		73,500	12,250	12,250	-	0.00%
Depreciation		470,000	78,333	78,333	(0)	0.00%
Subtotal Before Allocations		$ 7,218,995	$ 1,203,166	$ 1,167,773	$ 35,393	2.94%
Allocation of Support Departments		4,530,238	759,220	786,602	(27,383)	-3.61%
Total Operating Expenses		**$ 11,749,233**	**$ 1,962,386**	**$ 1,954,375**	**$ 8,010**	**0.41%**
Operating Surplus/(Deficit)		**$ (1)**	**$ (4,180)**	**$ 79,220**		

Debt Service Budget vs. Actual

	Budget FY 2025	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues					
Debt Service Rate Revenue	$ 10,156,560	$ 1,692,760	$ 1,692,760	$ -	0.00%
Septage Receiving Support - County	109,440	18,240	109,440	91,200	500.00%
Trust Fund Interest	208,200	34,700	35,251	551	1.59%
Reserve Fund Interest	731,800	121,967	95,127	(26,840)	-22.01%
Total Debt Service Revenues	**$ 11,206,000**	**$ 1,867,667**	**$ 1,932,577**	**$ 64,911**	**3.48%**
Debt Service Costs					
Total Principal & Interest	$ 7,780,072	$ 1,296,679	$ 1,607,984	$ (311,306)	-24.01%
Reserve Additions-Interest	731,800	121,967	95,127	26,840	22.01%
Debt Service Ratio Charge	325,000	54,167	54,167	-	0.00%
Est. New Debt Service - CIP Growth	2,368,300	394,717	83,411	311,306	78.87%
Total Debt Service Costs	**$ 11,205,172**	**$ 1,867,529**	**$ 1,840,689**	**$ 26,840**	**1.44%**
Debt Service Surplus/(Deficit)	**$ 828**	**$ 138**	**$ 91,889**		

Rate Center Summary

Total Revenues	$ 22,955,232	$ 3,825,872	$ 3,966,173	$ 140,301	3.67%
Total Expenses	22,954,405	3,829,914	3,795,064	34,850	0.91%
Surplus/(Deficit)	**$ 827**	**$ (4,042)**	**$ 171,108**		
Costs per 1000 Gallons	$ 3.47		$ 3.51		
Operating and DS	$ 6.77		$ 6.81		
Thousand Gallons Treated	3,390,400	565,067	557,096	(7,971)	-1.41%
or					
Flow (MGD)	9.289		8.985		

Rivanna Water & Sewer Authority
Monthly Financial Statements - August 2024

Glenmore Wastewater Rate Center
Revenues and Expenses Summary

Operating Budget vs. Actual

	Notes	Budget FY 2025	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues						
Operations Rate Revenue		$ 533,112	$ 88,852	$ 88,852	$ -	0.00%
Interest Allocation		3,700	617	1,242	625	101.35%
Total Operating Revenues		**$ 536,812**	**$ 89,469**	**$ 90,094**	**$ 625**	**0.70%**
Expenses						
Personnel Cost		$ 133,566	$ 22,261	$ 26,564	$ (4,303)	-19.33%
Professional Services		10,000	1,667	12	1,654	99.26%
Other Services & Charges		41,840	6,973	5,789	1,185	16.99%
Communications		3,700	617	3,666	(3,049)	-494.47%
Information Technology		14,350	2,392	-	2,392	100.00%
Supplies		-	-	-	-	
Operations & Maintenance		130,600	21,767	29,774	(8,008)	-36.79%
Equipment Purchases		3,500	583	583	(0)	0.00%
Depreciation		40,000	6,667	6,667	0	0.00%
Subtotal Before Allocations		$ 377,556	$ 62,926	$ 73,055	$ (10,129)	-16.10%
Allocation of Support Departments		159,262	26,631	27,502	(871)	-3.27%
Total Operating Expenses		**$ 536,818**	**$ 89,557**	**$ 100,557**	**$ (11,000)**	**-12.28%**
Operating Surplus/(Deficit)		**$ (6)**	**$ (88)**	**$ (10,463)**		

Debt Service Budget vs. Actual

Revenues						
Debt Service Rate Revenue		$ 48,780	$ 8,130	$ 8,130	$ -	0.00%
Trust Fund Interest		500	83	88	4	5.11%
Reserve Fund Interest		-	-	-	-	
Total Debt Service Revenues		**$ 49,280**	**$ 8,213**	**$ 8,218**	**$ 4**	**0.05%**
Debt Service Costs						
Total Principal & Interest		$ 18,720	$ 3,120	$ 3,120	$ -	0.00%
Estimated New Principal & Interest		30,560	5,093	5,093	-	0.00%
Reserve Additions-Interest		-	-	-	-	
Total Debt Service Costs		**$ 49,280**	**$ 8,213**	**$ 8,213**	**$ -**	**0.00%**
Debt Service Surplus/(Deficit)		**$ -**	**$ -**	**$ 4**		

Rate Center Summary

Total Revenues	$ 586,092	$ 97,682	$ 98,311	$ 629	0.64%
Total Expenses	586,098	97,770	108,770	(11,000)	-11.25%
Surplus/(Deficit)	**$ (6)**	**$ (88)**	**$ (10,459)**		
Costs per 1000 Gallons	$ 12.97		$ 14.68		
Operating and DS	$ 14.16		$ 15.88		
Thousand Gallons Treated	41,401	6,900	6,849	(51)	**-0.74%**
or					
Flow (MGD)	0.113		0.110		

Rivanna Water & Sewer Authority
Monthly Financial Statements - August 2024

Scottsville Wastewater Rate Center
Revenues and Expenses Summary

Operating Budget vs. Actual

	Notes	Budget FY 2025	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues						
Operations Rate Revenue		$ 405,420	$ 67,570	$ 67,570	$ -	0.00%
Interest Allocation		2,700	450	959	509	113.21%
Total Operating Revenues		**$ 408,120**	**$ 68,020**	**$ 68,529**	**$ 509**	**0.75%**
Expenses						
Personnel Cost		$ 133,636	$ 22,273	$ 26,565	$ (4,292)	-19.27%
Professional Services		5,000	833	10,454	(9,621)	-1154.51%
Other Services & Charges		33,400	5,567	4,268	1,298	23.32%
Communications		3,650	608	57	551	90.58%
Information Technology		15,150	2,525	-	2,525	100.00%
Supplies		-	-	-	-	
Operations & Maintenance		44,500	7,417	7,257	160	2.16%
Equipment Purchases		3,500	583	583	(0)	0.00%
Depreciation		20,000	3,333	3,333	(0)	0.00%
Subtotal Before Allocations		$ 258,836	$ 43,139	$ 52,518	$ (9,378)	-21.74%
Allocation of Support Departments		149,278	24,967	25,761	(794)	-3.18%
Total Operating Expenses		**$ 408,114**	**$ 68,106**	**$ 78,278**	**$ (10,172)**	**-14.94%**
Operating Surplus/(Deficit)		**$ 6**	**$ (86)**	**$ (9,749)**		

Debt Service Budget vs. Actual

Revenues						
Debt Service Rate Revenue		$ 32,556	$ 5,426	$ 5,426	$ -	0.00%
Trust Fund Interest		200	33	36	3	9.41%
Reserve Fund Interest		3,400	567	411	(156)	-27.48%
Total Debt Service Revenues		**$ 36,156**	**$ 6,026**	**$ 5,873**	**$ (153)**	**-2.53%**
Debt Service Costs						
Total Principal & Interest		$ 7,453	$ 1,242	$ 1,242	$ -	0.00%
Reserve Additions-Interest		3,400	567	411	156	27.48%
Estimated New Principal & Interest		25,300	4,217	4,217	-	0.00%
Total Debt Service Costs		**$ 36,153**	**$ 6,026**	**$ 5,870**	**$ 156**	**2.58%**
Debt Service Surplus/(Deficit)		**$ 3**	**$ 1**	**$ 4**		

Rate Center Summary

Total Revenues	$ 444,276	$ 74,046	$ 74,403	$ 357	0.48%
Total Expenses	444,267	74,132	84,148	(10,017)	-13.51%
Surplus/(Deficit)	**$ 9**	**$ (86)**	**$ (9,745)**		
Costs per 1000 Gallons	$ 17.26		$ 27.88		
Operating and DS	$ 18.79		$ 29.97		
Thousand Gallons Treated	23,643	3,941	2,808	(1,133)	**-28.74%**
or					
Flow (MGD)	0.065		0.045		

Rivanna Water & Sewer Authority
Monthly Financial Statements - August 2024

Administration

Operating Budget vs. Actual

	Notes	Budget FY 2025	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues						
Payment for Services SWA		$ 364,200	$ 60,700	$ 60,700	$ -	0.00%
Bond Proceeeds Funding Bond Issuance Costs		-	-	-	-	
Miscellaneous Revenue		-	-	355	355	
Total Operating Revenues		**$ 364,200**	**$ 60,700**	**$ 61,055**	**$ 355**	**0.58%**
Expenses						
Personnel Cost	**A,B**	$ 1,348,563	$ 224,761	$ 260,980	$ (36,220)	-16.11%
Professional Services	**C**	153,250	25,542	38,601	(13,059)	-51.13%
Other Services & Charges	**D**	161,100	26,850	46,248	(19,398)	-72.25%
Communications		9,700	1,617	6,955	(5,339)	-330.23%
Information Technology		5,000	833	2,831	(1,998)	-239.73%
Supplies		14,000	2,333	2,790	(456)	-19.56%
Operations & Maintenance		57,250	9,542	9,428	114	1.19%
Equipment Purchases		9,000	1,500	1,500	-	0.00%
Depreciation		-	-	-	-	
Total Operating Expenses		**$ 1,757,863**	**$ 292,977**	**$ 369,333**	**$ (76,356)**	**-26.06%**

Department Summary

Net Costs Allocable to Rate Centers		**$ (1,393,663)**	**$ (232,277)**	**$ (308,278)**	**$ 76,001**	**-32.72%**
Allocations to the Rate Centers						
Urban Water	44.00%	**$ 613,212**	**$ 102,202**	**$ 135,642**	**$ (33,440)**	
Crozet Water	4.00%	**$ 55,747**	**9,291**	**12,331**	**(3,040)**	
Scottsville Water	2.00%	**$ 27,873**	**4,646**	**6,166**	**(1,520)**	
Urban Wastewater	48.00%	**$ 668,958**	**111,493**	**147,974**	**(36,480)**	
Glenmore Wastewater	1.00%	**$ 13,937**	**2,323**	**3,083**	**(760)**	
Scottsville Wastewater	1.00%	**$ 13,937**	**2,323**	**3,083**	**(760)**	
	100.00%	**$ 1,393,663**	**$ 232,277**	**$ 308,278**	**$ (76,001)**	

Rivanna Water & Sewer Authority
Monthly Financial Statements - August 2024

Finance and Information Technology

Operating Budget vs. Actual

	Notes	Budget FY 2025	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues						
Payment for Services SWA		$ 541,000	$ 90,167	$ 90,167	$ 0	0.00%
Bond Proceeeds Funding Bond Issuance Costs	C	-	-	713,450	713,450	
Miscellaneous Revenue		-	-		-	
Total Operating Revenues		**$ 541,000**	**$ 90,167**	**$ 803,617**	**$ 713,450**	**791.26%**
Expenses						
Personnel Cost	A,B	$ 2,083,478	$ 347,246	$ 394,228	$ (46,982)	-13.53%
Professional Services	C	42,000	7,000	713,975	(706,975)	-10099.65%
Other Services & Charges		46,000	7,667	2,254	5,413	70.60%
Communication		65,000	10,833	6,213	4,620	42.65%
Information Technology		962,850	160,475	111,842	48,633	30.31%
Supplies		14,500	2,417	1,930	487	20.14%
Operations & Maintenance		5,000	9,542	145	9,397	98.48%
Equipment Purchases		7,500	1,250	1,250	-	0.00%
Depreciation		-	-	-	-	
Total Operating Expenses		**$ 3,226,328**	**$ 546,430**	**$ 1,231,837**	**$ (685,407)**	**-125.43%**

Department Summary

Net Costs Allocable to Rate Centers		**$ (2,685,328)**	**$ (456,263)**	**$ (428,220)**	**$ (28,043)**	**6.15%**
Allocations to the Rate Centers						
Urban Water	44.00%	**$ 1,181,544**	**200,756**	**188,417**	**12,339**	
Crozet Water	4.00%	**$ 107,413**	**18,251**	**17,129**	**1,122**	
Scottsville Water	2.00%	**$ 53,707**	**9,125**	**8,564**	**561**	
Urban Wastewater	48.00%	**$ 1,288,957**	**219,006**	**205,546**	**13,461**	
Glenmore Wastewater	1.00%	**$ 26,853**	**4,563**	**4,282**	**280**	
Scottsville Wastewater	1.00%	**$ 26,853**	**4,563**	**4,282**	**280**	
	100.00%	**$ 2,685,328**	**$ 456,263**	**$ 428,220**	**$ 28,043**	

Rivanna Water & Sewer Authority
Monthly Financial Statements - August 2024

Maintenance

Operating Budget vs. Actual

	Notes	Budget FY 2025	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues						
Payment for Services SWA		$ -	$ -	$ -	$ -	
Miscellaneous Revenue		-	-	-	-	
Total Operating Revenues		**$ -**	**$ -**	**$ -**	**$ -**	
Expenses						
Personnel Cost	**B**	$ 1,645,860	$ 274,310	$ 304,454	$ (30,144)	-10.99%
Professional Services		10,000	1,667	-	1,667	100.00%
Other Services & Charges		29,140	4,857	3,161	1,696	34.92%
Communications		16,200	2,700	2,652	48	1.79%
Information Technology		7,500	1,250	193	1,057	84.53%
Supplies		3,500	583	-	583	100.00%
Operations & Maintenance		138,800	23,133	16,087	7,046	30.46%
Equipment Purchases		145,750	24,292	21,667	2,625	10.81%
Depreciation		-	-	-	-	
Total Operating Expenses		**$ 1,996,750**	**$ 332,792**	**$ 348,214**	**$ (15,422)**	**-4.63%**

Department Summary

Net Costs Allocable to Rate Centers		**$ (1,996,750)**	**$ (332,792)**	**$ (348,214)**	**$ 15,422**	**-4.63%**
Allocations to the Rate Centers						
Urban Water	30.00%	**$ 599,025**	**$ 99,838**	**$ 104,464**	**$ (4,627)**	
Crozet Water	3.50%	**69,886**	**11,648**	**12,187**	**(540)**	
Scottsville Water	3.50%	**69,886**	**11,648**	**12,187**	**(540)**	
Urban Wastewater	56.50%	**1,128,164**	**188,027**	**196,741**	**(8,713)**	
Glenmore Wastewater	3.50%	**69,886**	**11,648**	**12,187**	**(540)**	
Scottsville Wastewater	3.00%	**59,903**	**9,984**	**10,446**	**(463)**	
	100.00%	**$ 1,996,750**	**$ 332,792**	**$ 348,214**	**$ (15,422)**	

Rivanna Water & Sewer Authority
Monthly Financial Statements - August 2024

Laboratory

Operating Budget vs. Actual

	Notes	*Budget FY 2025*	*Budget Year-to-Date*	*Actual Year-to-Date*	*Budget vs. Actual*	*Variance Percentage*
Revenues						
N/A						
Expenses						
Personnel Cost		$ 463,225	$ 77,204	$ 87,183	$ (9,978)	-12.92%
Professional Services		-	-	-	-	
Other Services & Charges		9,550	1,592	133	1,459	91.66%
Communications		1,050	175	117	58	33.11%
Information Technology		-	-	-	-	
Supplies		1,300	217	32	185	85.24%
Operations & Maintenance		133,600	22,267	17,360	4,907	22.04%
Equipment Purchases		23,900	3,983	678	3,305	82.97%
Depreciation		-	-	-	-	
Total Operating Expenses		**$ 632,625**	**$ 105,438**	**$ 105,502**	**$ (65)**	**-0.06%**

Department Summary

Net Costs Allocable to Rate Centers		**$ (632,625)**	**$ (105,438)**	**$ (105,502)**	**$ 65**	**-0.06%**
Allocations to the Rate Centers						
Urban Water	44.00%	**$ 278,355**	**$ 46,393**	**$ 46,421**	**$ (28)**	
Crozet Water	4.00%	**25,305**	**4,218**	**4,220**	**(3)**	
Scottsville Water	2.00%	**12,653**	**2,109**	**2,110**	**(1)**	
Urban Wastewater	47.00%	**297,334**	**49,556**	**49,586**	**(30)**	
Glenmore Wastewater	1.50%	**9,489**	**1,582**	**1,583**	**(1)**	
Scottsville Wastewater	1.50%	**9,489**	**1,582**	**1,583**	**(1)**	
	100.00%	**$ 632,625**	**$ 105,438**	**$ 105,502**	**$ (65)**	

Rivanna Water & Sewer Authority
Monthly Financial Statements - August 2024

Engineering

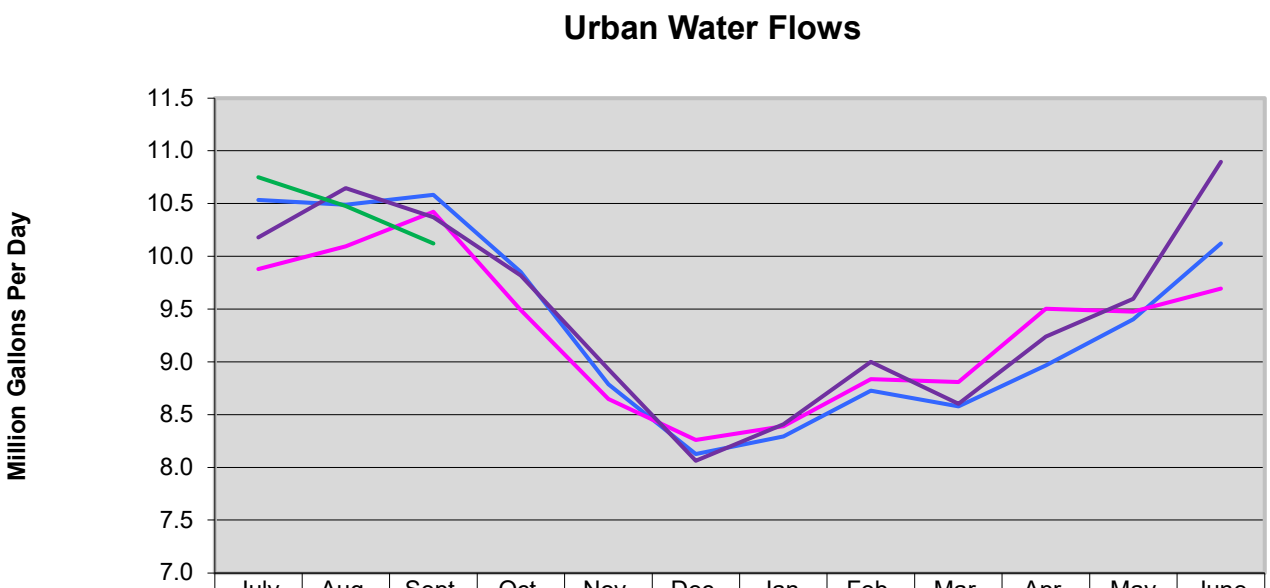
Operating Budget vs. Actual

	Notes	Budget FY 2025	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues						
Payment for Services SWA		$ -	$ -	$ 4,469	$ 4,469	
Total Operating Revenues		**$ -**	**$ -**	**$ 4,469**	**$ 4,469**	
Expenses						
Personnel Cost	**B**	$ 2,216,684	$ 369,447	$ 390,740	$ (21,292)	-5.76%
Professional Services		32,500	5,417	1,275	4,142	76.46%
Other Services & Charges		20,465	3,411	1,277	2,134	62.56%
Communications		15,150	2,525	1,848	677	26.83%
Information Technology		211,900	35,317	22,113	13,204	37.39%
Supplies		5,600	933	639	295	31.58%
Operations & Maintenance		82,620	13,770	7,441	6,329	45.96%
Equipment Purchases		21,500	3,583	3,583	0	0.00%
Depreciation		-	-	-	-	
Total Operating Expenses		**$ 2,606,419**	**$ 434,403**	**$ 428,915**	**$ 5,488**	**1.26%**

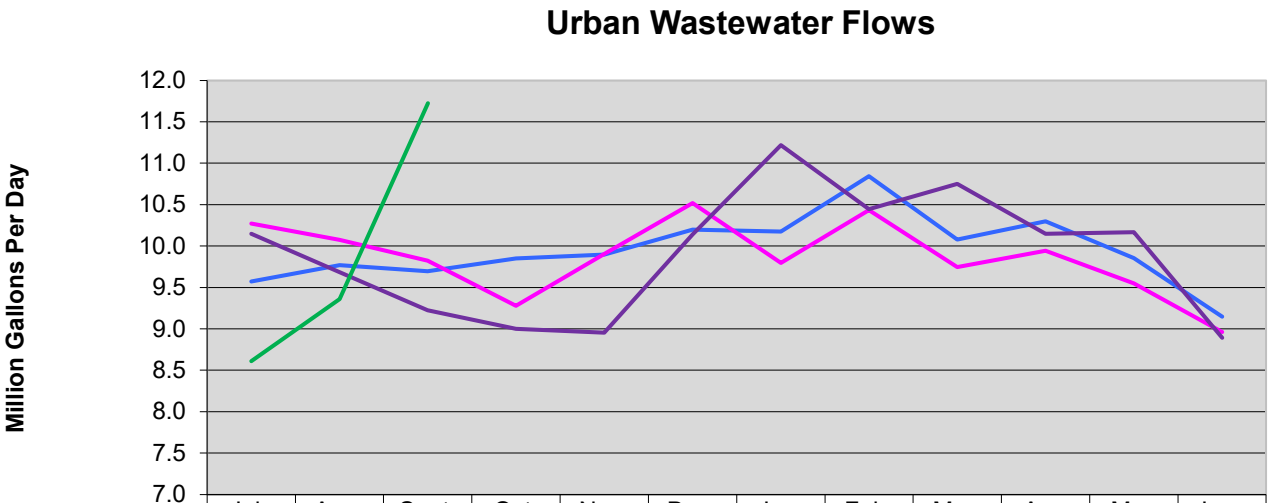
Department Summary

Net Costs Allocable to Rate Centers		**$ (2,606,419)**	**$ (434,403)**	**$ (424,446)**	**$ (1,018)**	**0.23%**
Allocations to the Rate Centers						
Urban Water	47.00%	**$ 1,225,017**	**$ 204,169**	**$ 199,490**	**$ 4,680**	
Crozet Water	4.00%	**104,257**	**17,376**	**16,978**	**398**	
Scottsville Water	2.00%	**52,128**	**8,688**	**8,489**	**199**	
Urban Wastewater	44.00%	**1,146,824**	**191,137**	**186,756**	**4,381**	
Glenmore Wastewater	1.50%	**39,096**	**6,516**	**6,367**	**149**	
Scottsville Wastewater	1.50%	**39,096**	**6,516**	**6,367**	**149**	
	100.00%	**$ 2,606,419**	**$ 434,403**	**$ 424,446**	**$ 9,957**	

Rivanna Water and Sewer Authority
Flow Graphs



	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
5 YR AVG.	10.53	10.49	10.58	9.85	8.79	8.13	8.29	8.73	8.58	8.97	9.40	10.12
FY 2023	9.88	10.10	10.42	9.49	8.65	8.26	8.39	8.84	8.81	9.50	9.48	9.69
FY 2024	10.18	10.64	10.37	9.82	8.93	8.06	8.41	9.00	8.60	9.24	9.60	10.90
FY 2025	10.75	10.47	10.12									



	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
5 YR AVG	9.57	9.77	9.69	9.85	9.89	10.20	10.17	10.84	10.08	10.30	9.86	9.15
FY 2023	10.27	10.07	9.82	9.28	9.90	10.52	9.79	10.43	9.74	9.94	9.55	8.96
FY 2024	10.15	9.68	9.22	9.00	8.95	10.14	11.22	10.45	10.75	10.15	10.17	8.89
FY 2025	8.61	9.36	11.72									

RIVANNA WATER & SEWER AUTHORITY
695 Moores Creek Lane | Charlottesville, Virginia 22902-9016
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MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS

FROM: DAVE TUNGATE, DIRECTOR OF OPERATIONS & ENVIRONMENTAL SERVICES

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: OPERATIONS REPORT FOR SEPTEMBER 2024

DATE: OCTOBER 22, 2024

WATER OPERATIONS:

The average and maximum daily water volumes produced in September 2024 were as follows:

Water Treatment Plant	***Average Daily Production (MGD)***	***Maximum Daily Production in the Month (MGD)***
South Rivanna	8.52	9.69 (9/10/2024)
Observatory	1.17	3.05 (9/4/2024)
North Rivanna	0.50	0.69 (9/16/2024)
Urban Total	10.19	11.27 (9/11/2024)
Crozet	0.71	0.99 (9/16/2024)
Scottsville	0.06	0.076 (9/9/2024)
Red Hill	0.0021	0.004 (9/5/2024)
RWSA Total	10.96	-

- All RWSA water treatment facilities were in regulatory compliance during the month of September.

Status of Reservoirs (as of October 15, 2024):

- Urban Reservoirs are 99% of Total Useable Capacity
  - South Rivanna Reservoir is 100% full
  - Ragged Mountain Reservoir is 98% full (water level lowered to complete an inspection)
  - Sugar Hollow Reservoir is 100% full
- Beaver Creek Reservoir (Crozet) is 100% full
- Totier Creek Reservoir (Scottsville) is 100% full

WASTEWATER OPERATIONS:

All RWSA Water Resource Recovery Facilities (WRRFs) were in regulatory compliance with their effluent limitations during September 2024. Performance of the WRRFs in September was as follows compared to the respective VDEQ permit limits:

WRRF	***Average Daily Effluent Flow (MGD)***	***Average $CBOD_5$ (ppm)***		***Average Total Suspended Solids (ppm)***		***Average Ammonia (ppm)***	
		RESULT	***LIMIT***	***RESULT***	***LIMIT***	***RESULT***	***LIMIT***
Moores Creek	11.8	<QL	9	0.39	22	<QL	2.2
Glenmore	0.113	2.8	15	3.1	30	NR	NL
Scottsville	0.06	1.8	25	4.8	30	NR	NL
Stone Robinson	0.002	5.0	30	5.1	30	NR	NL

NR = Not Required
NL = No Limit
<QL: Less than analytical method quantitative level (2.0 ppm for CBOD, 1.0 ppm for TSS, and 0.1 ppm for Ammonia).

Nutrient discharges at the Moores Creek AWRRF were as follows for September 2024.

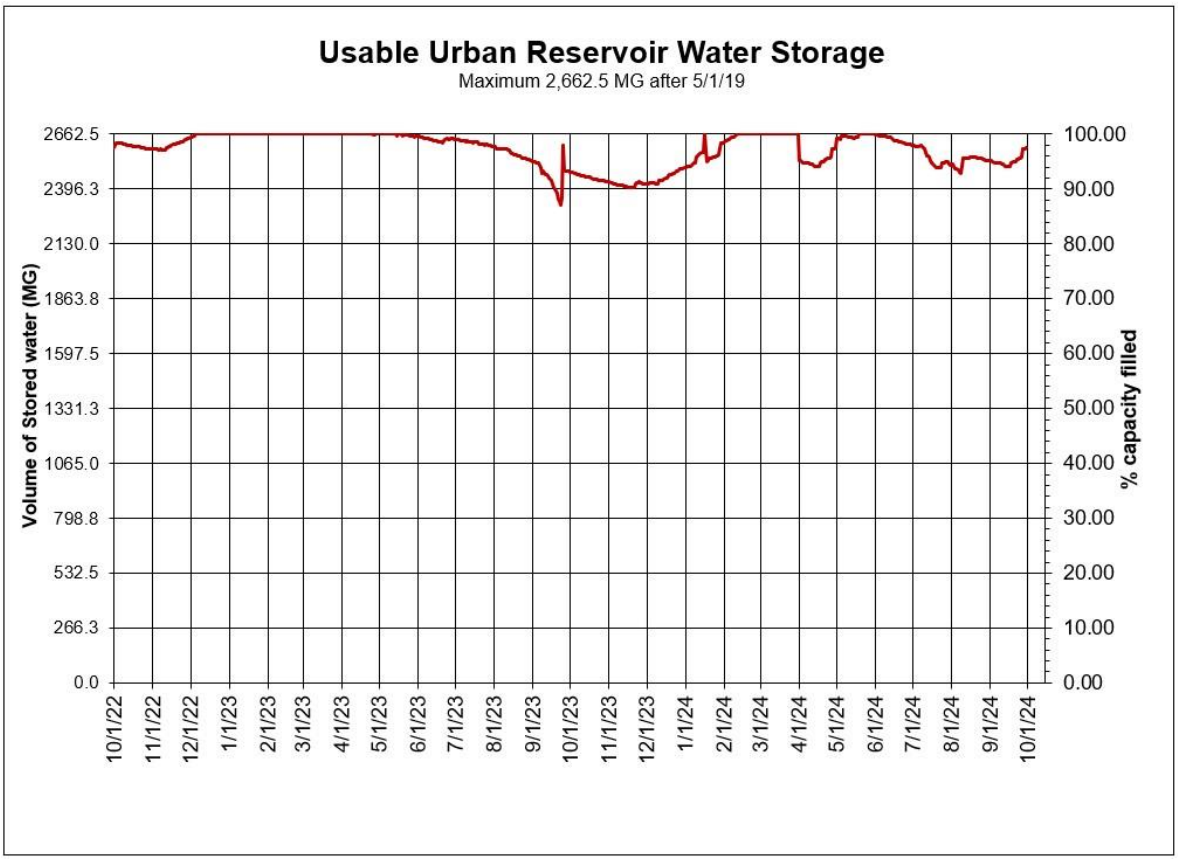
State Annual Allocation (lb./yr.) Permit		***Average Monthly Allocation (lb./mo.) ****	***Moores Creek Discharge September (lb./mo.)***	***Performance as % of monthly average Allocation****	***Year to Date Performance as % of annual allocation***
Nitrogen	282,994	23,583	8,444	36%	28%
Phosphorous	18,525	1,636	390	24%	16%

*State allocations are expressed as annual amounts. One-twelfth of that allocation is an internal monthly benchmark for comparative purposes only.

WATER AND WASTEWATER DATA:

The following graphs are provided for review:

- Usable Urban Reservoir Water Storage
- Urban Water and Wastewater Flows versus Rainfall


Usable Urban Reservoir Water Storage
Maximum 2,662.5 MG after 5/1/19
Volume of Stored water (MG)
% capacity filled
2662.5
2396.3
2130.0
1863.8
1597.5
1331.3
1065.0
798.8
532.5
266.3
0.0
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
10/1/22
11/1/22
12/1/22
1/1/23
2/1/23
3/1/23
4/1/23
5/1/23
6/1/23
7/1/23
8/1/23
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12/1/23
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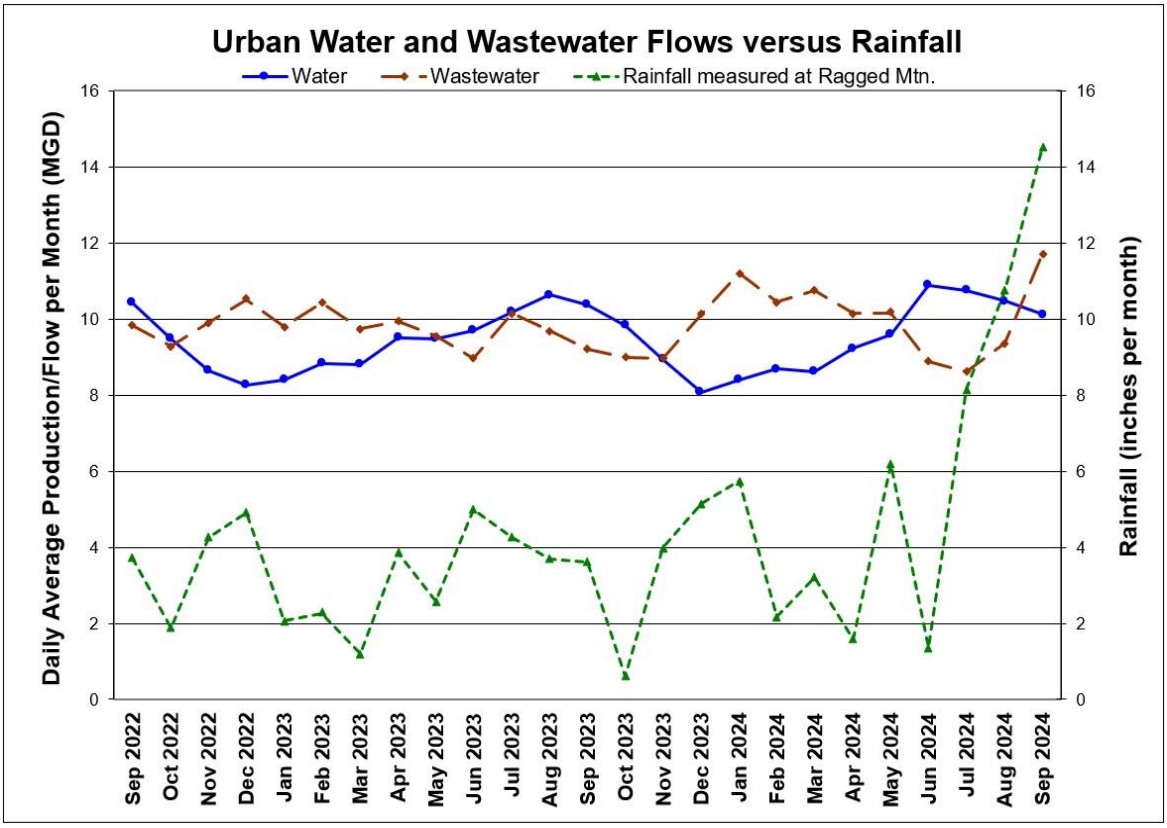
10/1/24


Urban Water and Wastewater Flows versus Rainfall
Water
Wastewater
Rainfall measured at Ragged Mtn.
Daily Average Production/Flow per Month (MGD)
Rainfall (inches per month)
16
14
12
10
8
6
4
2
0
Sep 2022
Oct 2022
Nov 2022
Dec 2022
Jan 2023
Feb 2023
Mar 2023
Apr 2023
May 2023
Jun 2023
Jul 2023
Aug 2023
Sep 2023
Oct 2023
Nov 2023
Dec 2023
Jan 2024
Feb 2024
Mar 2024
Apr 2024
May 2024
Jun 2024
Jul 2024
Aug 2024
Sep 2024

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MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS

FROM: JENNIFER WHITAKER, DIRECTOR OF ENGINEERING & MAINTENANCE

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: CIP PROJECTS REPORT

DATE: OCTOBER 22, 2024

This memorandum reports on the status of the following major Capital Projects as well as other significant operating, maintenance, and planning projects.

For the current CIP and additional project information, please visit: https://www.rivanna.org/wp-content/uploads/2024/06/2025-2029-CIP-Final-Draft.pdf

Summary

	Project	Construction Start Date	Construction Completion Date
1	MC 5kV Electrical System Upgrades	May 2022	June 2025
2	Rivanna Pump Station Restoration	July 2024	May 2025
3	Red Hill Water Treatment Plant Upgrades	October 2024	March 2026
4	South Fork Rivanna River Crossing	January 2025	January 2027
5	RMR to OBWTP Raw Water Line and Pump Station	January 2025	June 2029
6	MC Building Upfits and Gravity Thickener Improvements	February 2025	May 2027
7	MC Structural and Concrete Rehabilitation	February 2025	May 2027
8	Crozet Pump Stations Rehabilitation	April 2025	September 2027
9	MC Administration Building Renovation and Addition	June 2025	December 2027
10	Central Water Line	May 2025	March 2029
11	Crozet WTP GAC Expansion – Phase I	August 2025	March 2027
12	SRWTP – PAC Upgrades	August 2025	December 2026
13	RMR Pool Raise	September 2025	September 2026
14	SFRR to RMR Pipeline, Intake, and Facilities	February 2026	December 2030
15	Beaver Creek Dam, Pump Station, and Piping	May 2026	January 2030
16	Upper Schenks Branch Interceptor, Phase II	TBD	TBD
17	MC Pump Station Slide Gates, Valves, Bypass, and Septage Receiving Upgrades	June 2025	September 2026

Under Construction

1. MC 5kV Electrical System Upgrades
2. Rivanna Pump Station Restoration
3. Red Hill Water Treatment Plant Upgrades
4. South Fork Rivanna River Crossing
5. RMR to OBWTP Raw Water Line and Pump Station

Design and Bidding

6. MC Building Upfits and Gravity Thickener Improvements
7. MC Structural and Concrete Rehabilitation
8. Crozet Pump Stations Rehabilitation
9. MC Administration Building Renovation and Addition
10. Central Water Line
11. Crozet WTP GAC Expansion – Phase I
12. SRWTP – PAC Upgrades
13. RMR Pool Raise
14. SFRR to RMR Pipeline, Intake, and Facilities
15. Beaver Creek Dam, Pump Station, and Piping
16. Upper Schenks Branch Interceptor, Phase II
17. MC Pump Station Slide Gates, Valves, Bypass, and Septage Receiving Upgrades

Planning and Studies

18. MCAWRRF Biogas Upgrades
19. Flood Protection Resiliency Study

Other Significant Projects

20. Urgent and Emergency Repairs
21. Security Enhancements

Under Construction

1. MCAWRRF 5kV Electrical System Upgrades

Design Engineer:	Hazen and Sawyer
Construction Contractor:	Pyramid Electrical Contractors (Richmond, VA)
Construction Start:	May 2022
Percent Complete:	75%
Base Construction Contract + Change Order to Date = Current Value:	$5,180,000 - $800,127 = $4,379,873
Completion:	June 2025
Budget:	$6,200,000

Current Status: The Contractor is beginning the startup and integration process of the new 5kV switchgear. Once this has been successfully completed, further cable replacement scope items will be available for the Contractor to complete. The Contractor is also working on the abandonment of a secondary generator in the Blower Building that is no longer needed.

2. Rivanna Pump Station Restoration

Design Engineer:	Hazen/SEH
Construction Contractor:	MEB
Construction Start:	July 2024
Project Status:	Design & Material Acquisition/Construction
Completion:	May 2025
Budget:	$22,000,000

Current Status: Initial electrical demolition work has been completed. Contractor continues to order equipment/materials for replacement as design decisions are finalized. Rebuilt pumps will be installed and bypass pumping system removed by March 2025 with full restoration completed by May 2025.

3. Red Hill Water Treatment Plant Upgrades

Design Engineer:	Short Elliot Hendrickson (SEH)
Construction Contractor:	Anderson Construction (Lynchburg)
Construction Start:	October 2024
Percent Complete:	0%
Base Construction Contract + Change Order to Date = Current Value:	$1,742,375
Completion:	March 2026
Budget:	$2,050,000

Current Status: Work on-site is expected to begin this month. This project received partial grant funding from Albemarle County.

4. South Fork Rivanna River Crossing

Design Engineer:	Michael Baker International (Baker)
Construction Contractor:	Faulconer
Construction Start:	January 2025
Percent Complete:	0%
Base Construction Contract + Change Order to Date = Current Value:	$4,916,940
Completion:	January 2027
Budget:	$7,300,000

Current Status: a Notice to Proceed and Pre-Construction meeting are anticipated next month.

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

Design Engineer:	Kimley-Horn
Project Start:	August 2018
Project Status:	Award

Construction Start:	January 2025
Completion:	June 2029
Budget:	$64,000,000

Current Status: Construction bids were opened on October 1st. Staff is negotiating with the apparent low bidder since the bids received exceeded the budget for the project.

Design and Bidding

6. MCAWRRF Building Upfits and Gravity Thickener Improvements

Design Engineer:	Short Elliot Hendrickson (SEH)
Project Start:	March 2023
Project Status:	90% Design
Construction Start:	February 2025
Completion:	May 2027
Budget:	$7,500,000

Current Status: A 90% design workshop was held on October 7th. Final comments will be incorporated and an advertisement for construction bids is anticipated in early November.

7. MCAWRRF Structural and Concrete Rehabilitation

Design Engineer:	Hazen and Sawyer (Hazen)
Project Start:	April 2023
Project Status:	100% Design
Construction Start:	February 2025
Completion:	May 2027
Budget:	$11,300,000

Current Status: Bidding documents are being finalized and an advertisement for construction bids is anticipated in early November.

8. Crozet Pump Stations Rehabilitation

Design Engineer:	Wiley | Wilson
Project Start:	July 2023
Project Status:	100% Design
Construction Start:	April 2025
Completion:	September 2027
Budget:	$10,950,000

Current Status: The project has been advertised for construction and bids are due at the end of October.

9. Moores Creek Administration Building Renovation and Addition

Design Engineer:	SEH
Project Start:	October 2022
Project Status:	75% Design
Construction Start:	June 2025
Completion:	December 2027
Budget:	$25,000,000

Current Status: 90% design continues. Selections have been made by the furnishings & finishes committee for color palettes on interior elements. Revised exterior and interior renderings submissions were reviewed by staff in September and updated documents are being sent to the County ARB this month for approval. Exhibit designers are finalizing schedule and meetings for the detailed exhibit design process.

10. Central Water Line

Design Engineer:	Michael Baker International (Baker)
Project Start:	July 2021
Project Status:	92% Design
Construction Start:	May 2025
Completion:	March 2029
Budget:	$47,000,000

Current Status: The acquisition process continues for one private easement and an easement with UVA along Hereford Drive. Redesign efforts in the E. High Street area are in process and survey work has begun. An additional private easement will be required with the redesign as well as new easements on two City parcels. The project will be split into two bidding contracts so that the west section of the work can begin next spring while the east side of the project is being redesigned.

11. Crozet GAC Expansion – Phase I

Design Engineer:	SEH
Project Start:	July 2023
Project Status:	60% Design
Construction Start:	August 2025
Completion:	March 2027
Budget:	$6,550,000

Current Status: 60% design was completed in September. $6.24 M in grant funds from VDH have been awarded for this project.

12. SRWTP – PAC Upgrades

Design Engineer:	SEH
Project Start:	November 2023
Project Status:	100% Design
Construction Start:	August 2025
Completion:	December 2026
Budget:	$1,100,000

Current Status: The project is at 100% design. RWSA applied for a Congressionally Directed Spending grant from Senators Kaine and Warner for this project in the amount of $880,000 and have received approval of the grant by the Senate committee. Final grant approval will occur upon approval of the federal budget by Congress and the President.

13. RMR Pool Raise

Design Engineer:	Schnabel
Project Start:	April 2024
Project Status:	30% Design
Construction Start:	September 2025
Completion:	September 2026
Budget:	$5,000,000

Current Status: Staff and the Design Engineer continue to discuss and evaluate the findings of the Geotechnical Investigation. Meanwhile, the Design Engineer is developing clearing plans around the reservoir .

14. SFRR to RMR Pipeline, Intake, and Facilities

Design Engineer:	Kimley Horn/SEH
Project Start:	July 2023
Project Status:	50% Design
Construction Start:	February 2026
Completion:	December 2030
Budget:	$79,000,000

Current Status: The Design Engineer continues to work on both the new reservoir intake and the pipe between SFRR and RMR. Test holes along the water main alignment are anticipated to be completed this month. Installation of a nutrient analyzer at SFRR has been completed and was successfully started up. This is the last step of the water quality study, and a final report is anticipated by the end of the month.

15. Beaver Creek Dam, Pump Station and Piping Improvements

Design Engineer:	Schnabel Engineering (Dam)
Design Engineer:	Hazen & Sawyer (Pump Station)
Project Start:	February 2018
Project Status:	55% Design
Construction Start:	May 2026
Completion:	January 2030
Budget:	$47,100,000

Current Status: Design work is underway by Hazen for the new raw water pump station, intake, raw water main, and hypolimnetic oxygenation system, and by Schnabel Engineering for final design of the dam spillway upgrades, temporary detour, and spillway bridge. Geological, survey, and other field investigative work for the dam design were recently completed. Documents are being developed for acquisition or lease of property for the Pump Station from the County.

16. Upper Schenks Branch Interceptor, Phase II

Design Engineer:	CHA Consulting
Project Start:	July 2021
Project Status:	Design
Construction Start:	TBD
Completion:	TBD
Budget:	$4,725,000

Current Status: The design team has provided additional information to assist the County with easement acquisition considerations.

17. MC Pump Station Slide Gates, Valves, Bypass, and Septage Receiving Upgrades

Design Engineer:	Hazen and Sawyer (Hazen)
Project Start:	June 2023
Project Status:	60% Design
Construction Start:	June 2025
Completion:	September 2026
Budget:	$3,600,000

Current Status: Staff will be interviewing software vendors this month for additional improvements to the current septage receiving equipment and billing software, and Hazen is completing a flood resiliency evaluation.

Planning and Studies

18. MCAWRRF Biogas Upgrades

Design Engineer:	SEH
Project Start:	October 2021
Project Status:	Preliminary Engineering/Study (99%)
Completion:	December 2024
Budget:	$2,145,000

Current Status: RWSA and City staff continue to discuss all available options to reuse biogas.

19. Flood Protection Resiliency Study

Design Engineer:	TBD
Project Start:	August 2024
Project Status:	Preliminary Engineering/Study
Completion:	July 2025
Budget:	$278,500

Current Status: This project will identify individualized flood mitigation measures of six facilities to increase their resiliency from a 1% to a 0.2% flooding event. Facilities include: Mechums River Raw Water PS, Glenmore WW PS, Moores Creek AWRRF, Scottsville WWRRF, Crozet FET, and Crozet WW PS #2. A consultant is being selected to perform this study and the specific scope of the evaluation is being confirmed. This project received $198,930 in grant funding from FEMA and VDEM.

Other Significant Projects

20. Urgent and Emergency Repairs

Staff are currently working on several urgent repairs within the water and wastewater systems as listed below:

Project No.	Project Description	Approx. Cost
2023-01	Finished Water System ARV Repairs	$150,000
2024-03	MCAWRRF Secondary Clarifier #4 Equipment Failure	$150,000

- RWSA Finished Water ARV Repairs: RWSA Engineering staff recently met with Maintenance staff to identify a list of Air Release Valves (ARVs) that need to be repaired, replaced, or abandoned. Several of these locations will require assistance from RWSA On-Call Maintenance Contractors, due to the complexity of the sites (proximity to roadways, depth, etc.). The initial round will include seven (7) sites, all along the South Rivanna Waterline. Three replacements have been completed at this time, with a fourth site in progress. This in progress site included abandonment of an existing manual ARV located in the middle of the Route 29-Hydraulic intersection, which has been completed, and was a major coordination effort with VDOT, as they intend to pave this area in the coming weeks. The Contractor is working with VDOT on permits for the final sites.
- MCAWRRF Secondary Clarifier #4 Equipment Failure: On Sunday Evening, March 3rd, RWSA Wastewater Department staff identified that Secondary Clarifier #4 at MCAWRRF appeared to have a significant mechanical malfunction. Upon further review by staff, the rotating arm of the clarifier mechanism caught the stationary arm, wrapping it around the center of the clarifier. Staff mobilized MEB General Contractors under its On-Call Maintenance Construction Services Contract with Faulconer, and the clarifier was back up and operational with just one stationary arm on Friday, March 8th. Staff are waiting on the necessary parts to complete repairs to the clarifier arms, but in the meantime, the clarifier is operational should it be needed for wet weather events. The remaining repairs will be completed by the RWSA Maintenance Department.

21. Security Enhancements

Design Engineer:	Hazen & Sawyer
Construction Contractor:	Security 101 (Richmond, VA)
Construction Start:	March 2020
Percent Complete:	90% (WA9), 95% (WA10)
Based Construction Contract + Change Orders to Date = Current Value:	$718,428 (WA1) + $834,742 (WA2-10)
Completion:	June 2024 (WA9), August 2024 (WA10)
Budget:	$2,810,000

Current Status: WA9 will include installation of card access on all exterior doors at the South Rivanna WTP and has been amended to include interior doors at the new IT data center. WA10 will include installation of card access on the exterior doors of the finished water pump station and "795" tank buildings in Scottsville. Device installation is complete here as well, with programming and startup ongoing. Design of MCAWRRF entrance modifications with Hazen & Sawyer continues, with discussions with Dominion Energy also ongoing, as relocation of existing electrical infrastructure will

be required. This relocation process will need to be finalized prior to the project proceeding to the bidding phase. Relocation of existing electrical infrastructure will require coordination with the adjacent landowner, as the infrastructure must be completely relocated from the entrance area. As these discussions are ongoing, staff have submitted appropriate permitting documents to Albemarle County.

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MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS

FROM: BETSY NEMETH, DIRECTOR OF ADMINISTRATION AND COMMUNICATIONS

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: ADMINISTRATION AND COMMUNICATIONS REPORT

DATE: OCTOBER 22, 2024

Human Resources

Annual turnover for the Rivanna Water and Sewer Authority for the fiscal year beginning on July 1, 2024, is 2.9% through October 8, 2024.

We have had two new employees join our Wastewater Department team: Timothy Wood and Adam Fusco.

Michelle Simpson, one of our Senior Civil Engineers, encouraged us to show our support for those who have been affected by breast cancer during Breast Cancer Awareness Month. On October 16, 2024, all of our employees wore pink shirts to work to express their support to fellow team members and the community.

Safety

Our Safety Committee held its quarterly in-person meeting on September 19, 2024, during which they reviewed our upcoming CIP projects and our new incident reporting system.

Community Outreach

We had the pleasure of taking Thomas Hutka, the new Director of Water & Sewer for Greene County on tour of our South Rivanna and Observatory water treatment plants and the Moores Creek Advanced Water Resource Recovery Facility on September 18, 2024.

On September 20, 2024, the "Economics of Water" class from the University of Virginia's Darden School of Business toured the South Rivanna Water Treatment Plant with our Water Manager Daniel Campbell and then learned about the finances of our operations from Lonnie Wood, the Director of Finance & IT.

Tia Waters, our Communications & Outreach Coordinator and Betsy Nemeth, our Director of Administration & Communications attended the Rivanna River Basin Annual Conference on September 27, 2024.

The Imagine a Day Without Water Art Contest that we sponsor with the Albemarle County Service Authority and the City of Charlottesville began on September 30, 2024 and will accept entries through October 28, 2024. The theme for this year's contest is "What's Your Drop in the Bucket".

RIVANNA WATER & SEWER AUTHORITY
695 Moores Creek Lane | Charlottesville, Virginia 22902-9016
434.977.2970
434.293.8858
www.rivanna.org

MEMORANDUM

TO: **RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS**

FROM: **JENNIFER WHITAKER, DIRECTOR OF ENGINEERING & MAINTENANCE**

REVIEWED BY: **BILL MAWYER, EXECUTIVE DIRECTOR**

SUBJECT: **WHOLESALE METERING REPORT FOR SEPTEMBER 2024**

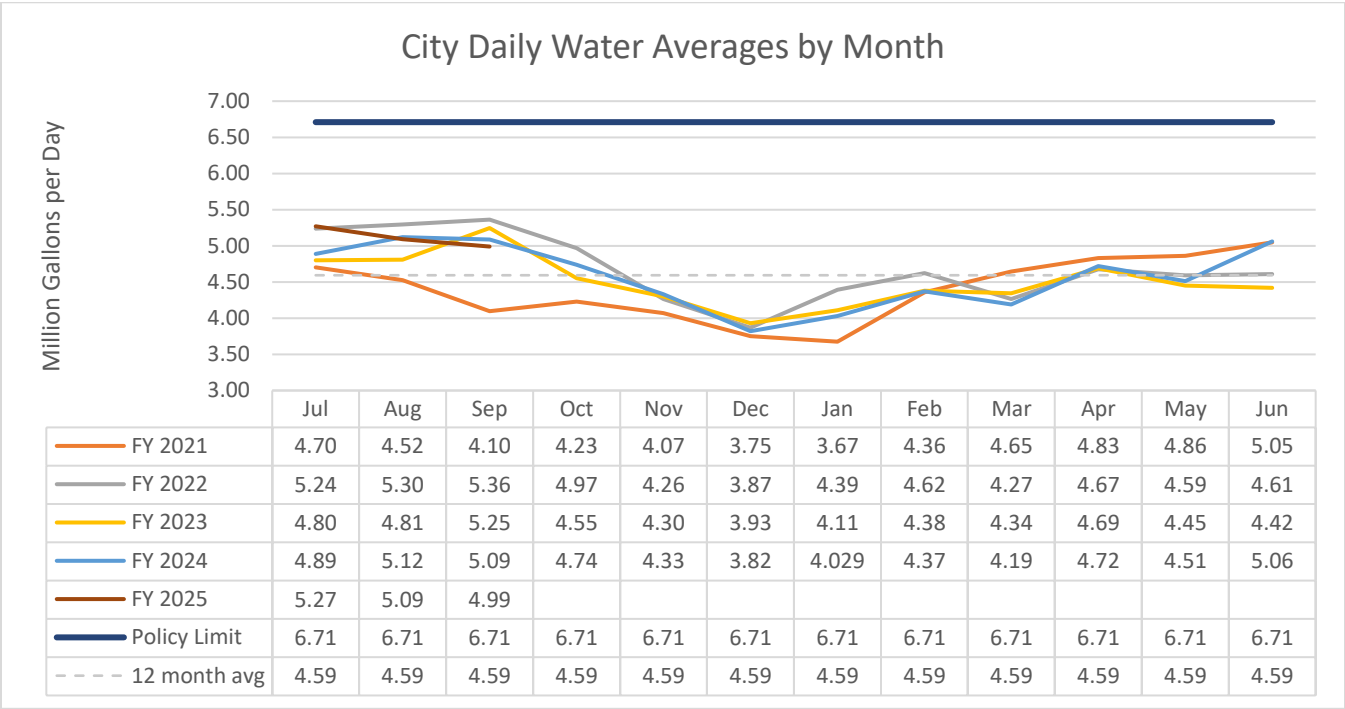
DATE: **OCTOBER 22, 2024**

The monthly and average daily Urban water system usages by the City and the ACSA for September 2024 were as follows:

		Month	***Daily Average***	
City Usage (gal)		149,694,053	4,989,802	**49.3%**
ACSA Usage (gal)		153,986,571	5,132,886	**50.7%**
Total (gal)		**303,680,624**	**10,122,687**	

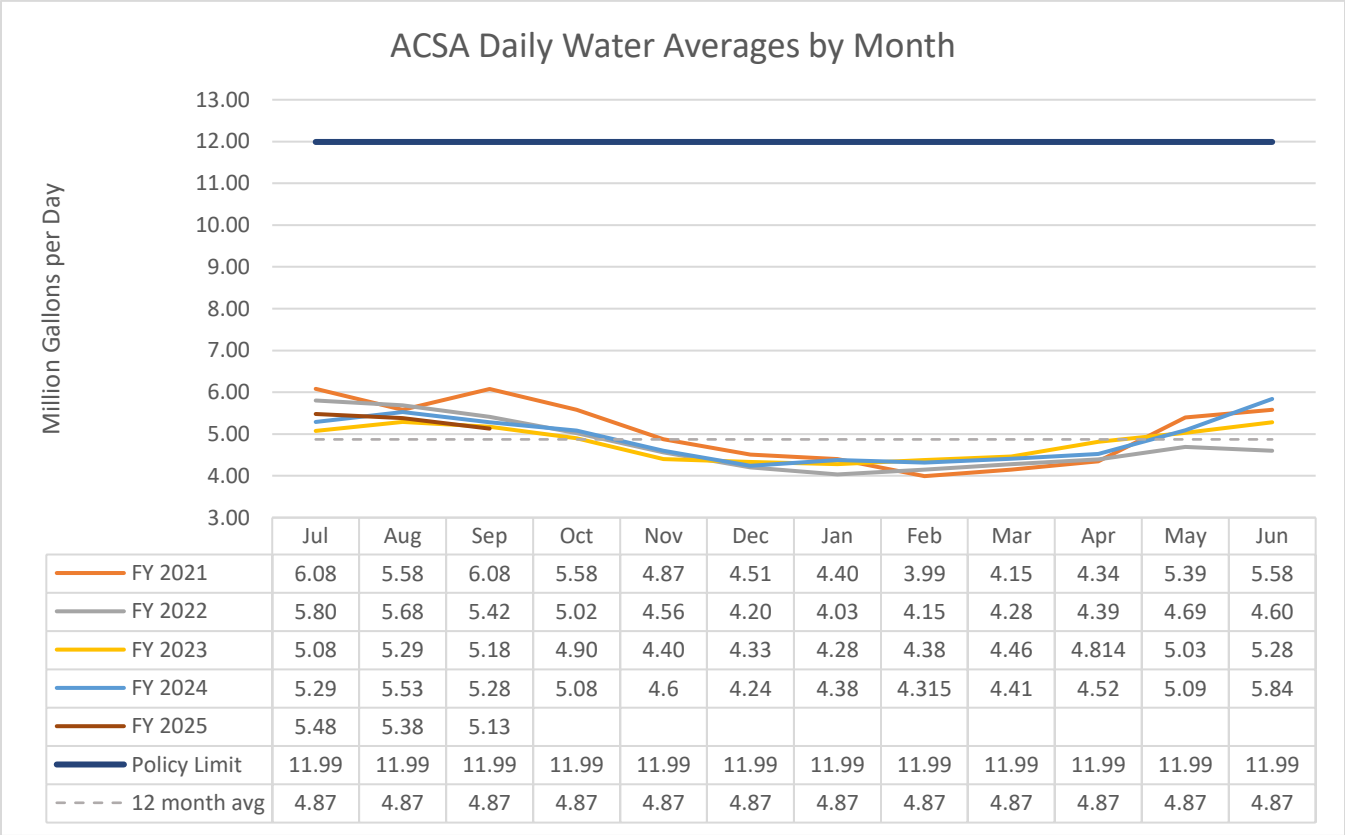
The *RWSA Wholesale Metering Administrative and Implementation Policy* requires that water use be measured based upon the annual average daily water demand of the City and ACSA over the trailing twelve (12) consecutive month period. The *Water Cost Allocation Agreement (2012)* established a maximum water allocation for each party. If the annual average water usage of either party exceeds this value, a financial true-up would be required for the debt service charges related to the Ragged Mountain Dam and the SRR-RMR Pipeline projects. Below are graphs showing the calculated monthly water usage by each party dating back to the beginning of FY21, the trailing twelve-month average (extended back to October 2023), and that usage relative to the maximum allocation for each party (6.71 MGD for the City and 11.99 MGD for ACSA). Completed in 2019 for a cost of about $3.2 M, our Wholesale Metering Program consists of 25 remote meter locations around the City boundary and 3 finished water flow meters at treatment plants.

Figure 1: City of Charlottesville Monthly Water Usage and Allocation



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 2021	4.70	4.52	4.10	4.23	4.07	3.75	3.67	4.36	4.65	4.83	4.86	5.05
FY 2022	5.24	5.30	5.36	4.97	4.26	3.87	4.39	4.62	4.27	4.67	4.59	4.61
FY 2023	4.80	4.81	5.25	4.55	4.30	3.93	4.11	4.38	4.34	4.69	4.45	4.42
FY 2024	4.89	5.12	5.09	4.74	4.33	3.82	4.029	4.37	4.19	4.72	4.51	5.06
FY 2025	5.27	5.09	4.99									
Policy Limit	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71
12 month avg	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59

Figure 2: Albemarle County Service Authority Monthly Water Usage and Allocation



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
FY 2021	6.08	5.58	6.08	5.58	4.87	4.51	4.40	3.99	4.15	4.34	5.39	5.58
FY 2022	5.80	5.68	5.42	5.02	4.56	4.20	4.03	4.15	4.28	4.39	4.69	4.60
FY 2023	5.08	5.29	5.18	4.90	4.40	4.33	4.28	4.38	4.46	4.814	5.03	5.28
FY 2024	5.29	5.53	5.28	5.08	4.6	4.24	4.38	4.315	4.41	4.52	5.09	5.84
FY 2025	5.48	5.38	5.13									
Policy Limit	11.99	11.99	11.99	11.99	11.99	11.99	11.99	11.99	11.99	11.99	11.99	11.99
12 month avg	4.87	4.87	4.87	4.87	4.87	4.87	4.87	4.87	4.87	4.87	4.87	4.87

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TO: RIVANNA WATER & SEWER AUTHORITY
BOARD OF DIRECTORS

FROM: BETHANY HOUCHENS, WATER RESOURCES COORDINATOR
DAVE TUNGATE, DIRECTOR OF OPERATIONS & ENVIRONMENTAL SERVICES

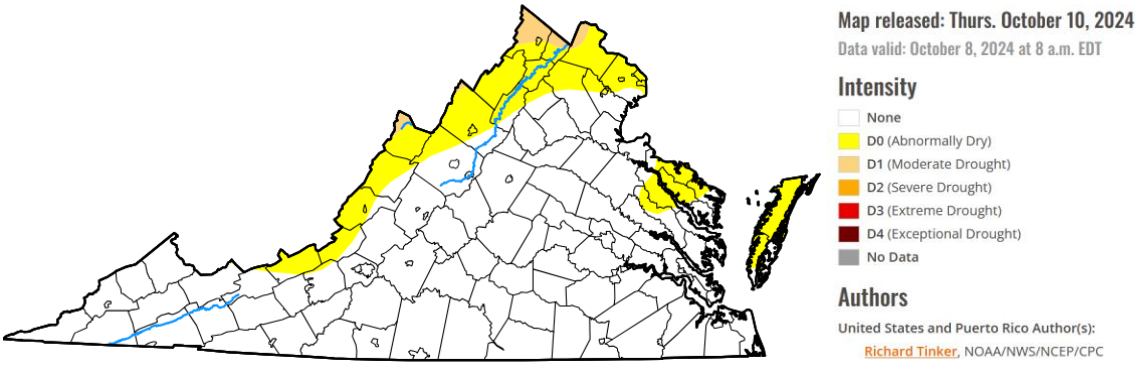
REVIEWED: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: DROUGHT MONITORING REPORT

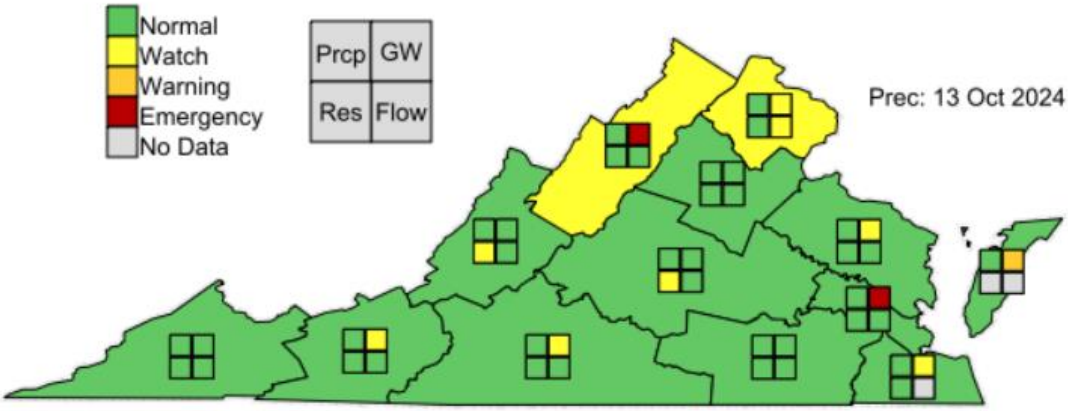
DATE: OCTOBER 22, 2024

State and Federal Drought Monitoring as of October 14, 2024:

- U.S. Drought Monitoring Report: Indicates the City of Charlottesville and Albemarle County are in normal conditions.



- VDEQ Drought Status Report: Our region is listed as being in a "Normal" level for precipitation, groundwater, and streamflow. Reservoir levels are in a "Watch" status.



Precipitation & Stream Flows

Charlottesville Precipitation					
Year	Month	Observed (in.)	Normal (in.)	Departure (in.)	Comparison to Normal (%)
2021	Jan - Dec	33.82	41.61	-7.79	-19
2022	Jan - Dec	43.53	41.61	+1.92	+5
2023	Jan – Dec	26.95	41.61	-14.66	-35
2024	Jan - Sept	35.22	31.9	+3.32	+9.9

Source: National Weather Service, National Climatic Data Center, Climate Summary for Charlottesville, Charlottesville Albemarle Airport station

USGS Stream Gaging Station Near the Urban Area (Oct 8-14)				
Gage Name	Rolling 7-day Avg. Stream Flow		Median Daily Streamflow	
	cfs	mgd	cfs	mgd
Mechums River	173.7	112.3	34	22
Moormans River	119.5	77.2	14	9
NF Rivanna River	112	72.3	23	14.9
SF Rivanna River	359	231.7	84	54.3

Median daily flow: October 14th for the period of record (approx. 30 - 80 years)

Status of Reservoirs as of October 14, 2024

- Urban Reservoirs are 99% of Total Useable Capacity
- Beaver Creek Reservoir (Crozet) is 100% of Total Useable Capacity
- Totier Creek Reservoir (Scottsville) is 100% of Total Useable Capacity

Drought History in Central Virginia

- Severe: 1930, 1966, 1982, 2002
- Longest: May 2007 - April 2009; 103 weeks
- Significant: every 10 -15 years
- Drought of Record: 2001- 2002; 18 months

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MEMORANDUM

TO: **RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS**

FROM: **LONNIE WOOD, DIRECTOR OF FINANCE AND INFORMATION TECHNOLOGY**

REVIEWED BY: **BILL MAWYER, EXECUTIVE DIRECTOR**

SUBJECT: **DISPOSITION OF FY 2024 RATE CENTER RESULTS AND WORKING CAPITAL TARGET**

DATE: **OCTOBER 22, 2024**

This memo will discuss some highlights of the Authority's year-end results and describe our process of funding the operating account for everyday working capital purposes.

The Authority ended the previous fiscal year with a small cash basis surplus of $694,000 meaning the Authority's revenues were slightly higher than expenses. After consideration of certain non-cash items, the FY 2024 cash balance in the operations account is $7.9 million which exceeds the policy target amount of $7.8 million.

The primary contributing factor to the positive year-end results is the Operating Revenues exceeding budget estimates by $1.14 million. More specifically, Rate revenues exceeded budget by $860,700, Interest Revenues by $168,000, and all other revenues for (leases, septage, miscellaneous) by $110,000. This additional revenue helped cover total expenses, which exceeded the budget by $644,000. The primary cause of this variance is related to Utilities going over budget estimates by $777,700 and Chemicals by $234,600. These items were discussed in the budget discussions last spring as having a lagging budget vs. actual effect for the last few years (including FY 2024). The current FY 2025 budget should have mitigated this issue.

Policy Background: After completion of the audit, staff performs an analysis and reconciliation between rate centers of the year-ending financial results and the effect on the operating cash liquidity position. This is also done to ensure that rate center results are kept separate from each other. In some years, one rate center may have a deficit, and others may have a surplus, therefore, we do not want one rate center's surplus funding another rate center's deficit.

There is only one operating cash account where all transactions originate during the year for all capital and operating activities, including inflow from revenues and bond proceeds, and outflow for operating expenses, capital projects and debt payments. Capital transactions are reconciled and separated at the end of each month, (i.e., no capital funds are in the operations account at the end of each month or at year end). However, all rate centers' operating results are comingled until this process of determining the

results for the year and making transfers to or from the respective rate center reserves to ensure proper segregation and keep the operating account whole at the target level.

The operations account has a policy target for working cash (a.k.a. working capital) balance of 60 days of cash on hand to meet daily and monthly cash flow needs, which for FY 2025 is $9,063,000 (based on the FY 2025 budget of $55.1 million). This policy target increased $1.2 million from the prior year as shown below:

Comparison of Policy Target

FY 2025	$	9,063,000
FY 2024		7,840,550
Target Increase	$	1,222,450

This is due to the FY 2025 budget increase of nearly 16% ($7,437,000 increase) compared to the FY 2024 budget.

We then compare the updated policy target for FY 2025 (new year) to actual cash balance for the fiscal year-end for FY 2024 (previous year). The variance, if any, is brought before the Board for action, which is consistent with the Authority's financial policy.

At year-end, operating cash and cash equivalents were as follows:

Cash on hand	$ 7,890,000
60 Day Cash Target	$ 9,063,000
Deficit Operational Cash	$(1,173,000)

The policy target amount of operating cash is underfunded by $1,173,000 due to the additional 60-day target balance. Therefore, the following transfers to/(from) the discretionary reserves are recommended for FY 2025 to bring the operations account back to the target balance and properly keep the six rate center reserves separated. FY 2023 to FY 2020 transfers related to similar year-end actions are included for comparison:

Transfers to (from) reserves based on ending results for each rate center:

	FY2024	FY2023	FY2022	FY2021	FY2020
Urban Water	**$ (830,900)**	$ (1,116,400)	$ (302,200)	$ (473,900)	$ (432,300)
Crozet Water	**(97,250)**	(210,200)	(115,900)	(107,700)	117,500
Scottsville Water	**(88,350)**	(78,200)	(64,600)	18,800	64,500
Urban Wastewater	**(120,500)**	(981,300)	(31,500)	869,900	153,000
Glenmore Wastewater	**(27,550)**	(22,000)	(53,800)	(3,800)	(25,500)
Scottsville Wastewater	**(8,450)**	(22,100)	(14,400)	(2,900)	27,600
	$ (1,173,000)	$ (2,430,200)	$ (582,400)	$ 300,400	$ (95,200)

To summarize the year-end process, one of the Authority's financial policies is to keep the operations account financially sound with 60 days of working cash for normal operating cash flow needs. That goal will continue to be met, and the reserves will continue to provide for the yearly variances in budget versus actual results. As any given year progresses, the operations account temporarily funds rate center deficits and accumulates surpluses, and a reconciliation of the results to allocate the respective surpluses and

deficits is performed annually after the year-end audit is complete. The Board has taken similar action for the previous 18 years. Attached is a summary of the ending reserves for Fiscal Year 2024.

Board Action Requested:

Authorizing the transfer of funds to/(from) the respective reserves for FY 2024 ending results to or from the operations account as follows:

Urban Water	$ (830,900)	Urban Wastewater	$ (120,500)
Crozet Water	$ (97,250)	Glenmore Wastewater	$ (27,550)
Scottsville Water	$ (88,350)	Scottsville Wastewater	$ (8,450)

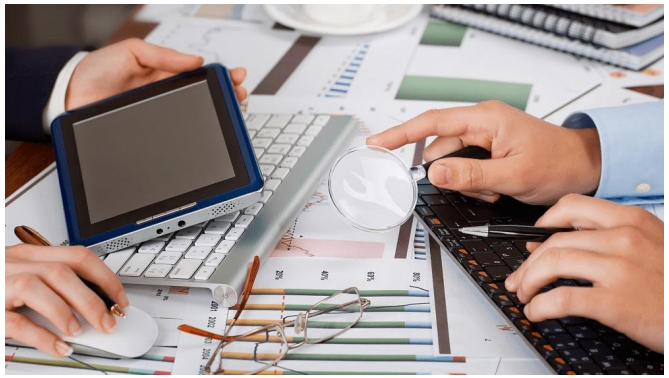
Attachment

Rivanna Water and Sewer Authority
Statement of Reserve Balances
June 2024 Reserves

		June FY 2024 Ending Balance	FROM (TO) OPERATIONS ACCOUNT FY 2024 ending results reserve adjustment proposed Board action needed **	Adjusted FY 2024 Ending Balance
Urban Water				
Discretionary Reserve		$ 13,492,077	$ (830,900)	$ 12,661,177
Rate Stabilization Fund		1,000,000		1,000,000
Watershed Management Fund		297,528		297,528
Subtotal		$ 14,789,605		$ 13,958,705
Urban Wastewater				
Discretionary Reserve		$ 11,733,990	(120,500)	$ 11,613,490
Rate Stabilization Fund		1,000,000		1,000,000
Subtotal		$ 12,733,990		$ 12,613,490
Crozet Water				
Discretionary Reserve		$ 2,304,995	(97,250)	$ 2,207,745
Scottsville Water				
Discretionary Reserve		$ 177,545	(88,350)	$ 89,195
Glenmore Wastewater				
Discretionary Reserve		$ 8,234	(27,550)	$ (19,316)
Scottsville Wastewater				
Discretionary Reserve		$ 86,345	(8,450)	$ 77,895
Capital Fund				
Specific Capital Projects		$ (10,407,270)	-	$ (10,407,270)
Vehicle Replacement Fund		$ 1,303,061		$ 1,303,061
Subtotal Discretionary Reserves		$ 20,996,505	$ (1,173,000)	$ 19,823,505
Indenture Restricted Minimum		$ 500,000		$ 500,000
Total Reserves	*	**$ 21,496,505**		**$ 20,323,505**

*** - Agrees to investment balances - audited.**

**** - Proposed Board action**



FINANCIAL UPDATE

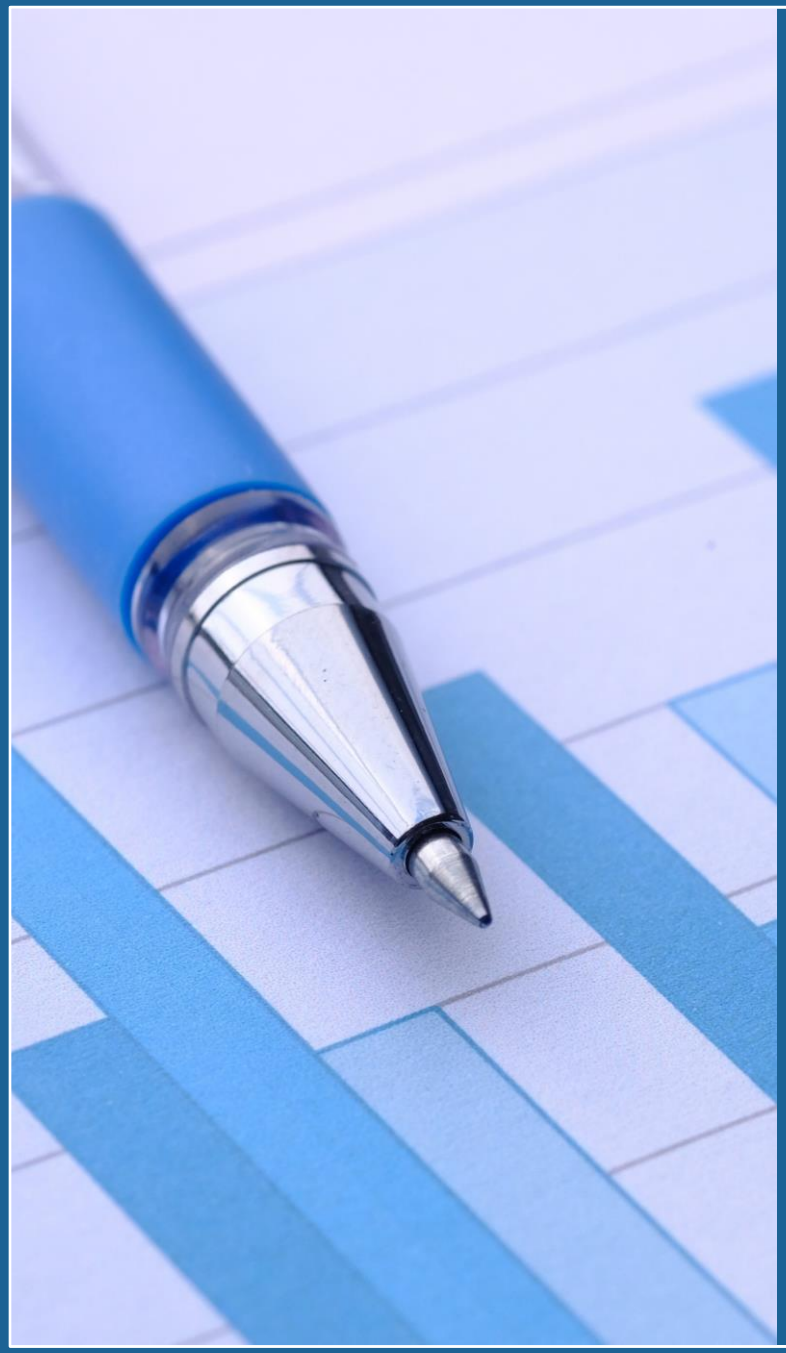
FY 2024
Year-End Results

FOR THE BOARD OF DIRECTORS

10/22/2024

By Lonnie Wood, Director of Finance & Information Technology

Stephanie Deal, Finance Manager



TOPICS FOR TODAY

- Financial Policies
- Year-End Results
- Operating Working Capital Target
- Disposition of Rate Center Results
- Board Action: Approve Fund Transfers

FINANCIAL POLICIES

- Objectives
- Reserve & Fund Policies
  - Tier 2 – Operating
  - Tier 3 - Discretionary

FINANCIAL POLICY
Rivanna Water & Sewer Authority
Revised and updated August 25, 2020

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Operating Budget Policies	4
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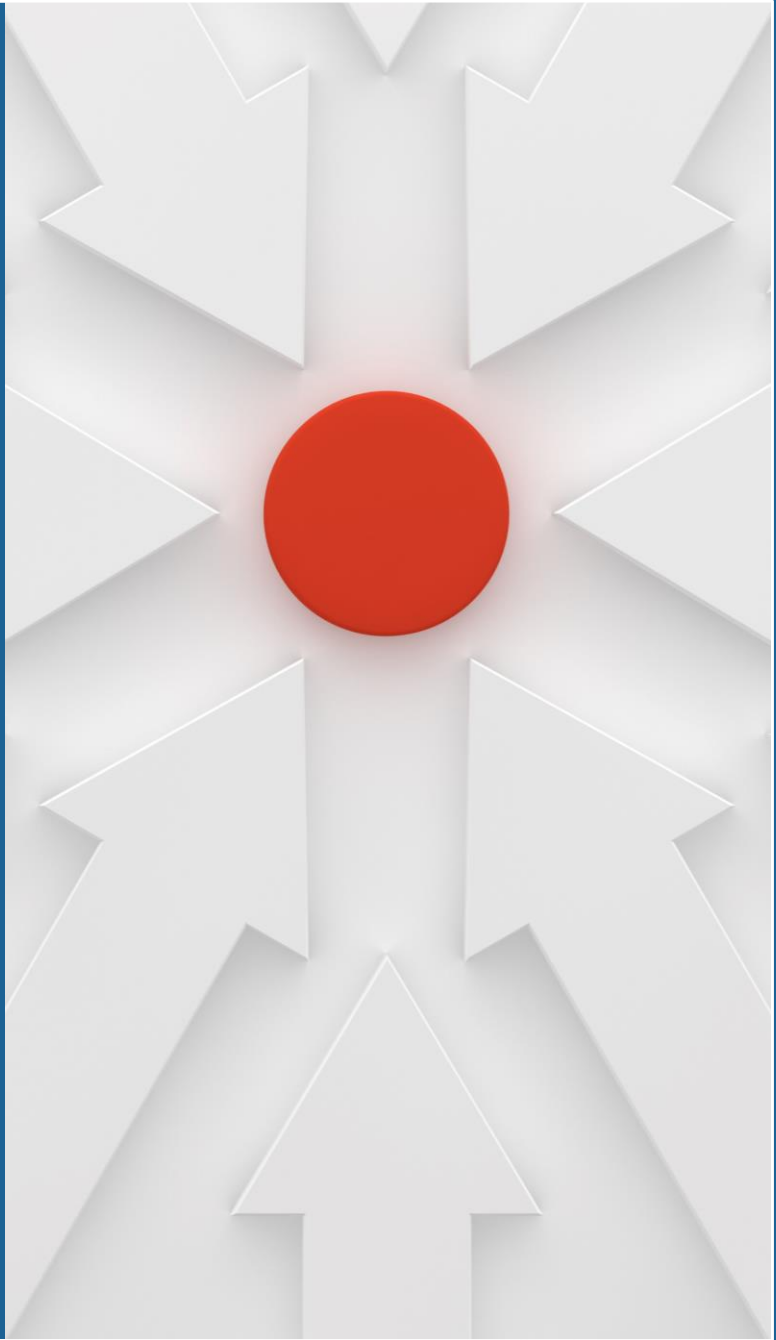
Debt Policies	6
Reserve & Fund Policies	7
Post Issuance Compliance Policies	9

FINANCIAL POLICY OBJECTIVES

- Prepares for and insulates from fiscal crisis.
- Enhances financing opportunities with highest credit & bond ratings possible.
- Promotes long-term financial stability.
- Focuses on total financial picture of the Authority.
- Links long-term financial planning with day-to-day operations.



RESERVES – TIER 2

- The Operating Fund is the Authority's daily cash account and is not accounted for by rate center. The operating account is recommended to have a minimum balance of 20% of the annual budget by the Bond Indenture but is not required to be maintained at this level.
- Currently the operating account is targeted to have 60 days of the total annual budget available for daily and monthly cash flow needs.

RESERVES – TIER 3 DISCRETIONARY

- Depreciation, yearly surpluses, and planned excess rate revenues from CIP growth rate are deposited in these reserves.
- Yearly deficits are funded from these reserves to replenish the operating account using the "Disposition of Year-end Results" and related Board Action.

YEAR END RESULTS

695 Moores Creek Lane
Charlottesville, VA 22902-9016
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www.rivanna.org

MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS

FROM: LONNIE WOOD, DIRECTOR OF FINANCE AND INFORMATION TECHNOLOGY

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: DISPOSITION OF FY 2024 RATE CENTER RESULTS AND WORKING CAPITAL TARGET

DATE: OCTOBER 22, 2024

This memo will discuss some highlights of the Authority's year-end results and describe our process of funding the operating account for everyday working capital purposes.

The Authority ended the previous fiscal year with a small cash basis surplus of $694,000 meaning the Authority's revenues were slightly higher than expenses. After consideration of certain non-cash items, the FY 2024 cash balance in the operations account is $7.9 million which exceeds the policy target amount of $7.8 million.

FY 2024 - Budget vs Actual Results

Operating Expenses	Budget	Actual	Variance	
Utilities	1,629,225	2,406,953	(777,728)	-48%
Chemicals	3,029,488	3,264,072	(234,584)	-8%
All Other Line Items	19,747,806	19,379,719	368,087	2%
			$ (644,225)	

MAJOR EXPENSES

OPERATING WORKING CAPITAL TARGET

Policy Target Calculation

Some rounding variances will happen

		FY 2025		FY 2024
Adopted Budget	$	55,135,000	$	47,698,000
Divide by 365 (Daily working cash needs)		151,055		130,679
60 Days of Cash	$	9,063,288	$	7,840,767
Difference	$	1,222,521		

New Operating Cash Target

Operational Cash Adjustment Needed

Cash on Hand - FY 2024	$	7,890,000
60 Day Cash Target - FY 2025		9,063,000
Deficit Operational Cash	$	(1,173,000)

STATEMENT OF RESERVE BALANCES

Rivanna Water and Sewer Authority
Statement of Reserve Balances
June 2024 Reserves

	June FY 2024 Ending Balance	FROM (TO) OPERATIONS ACCOUNT **FY 2024** ending results reserve adjustment proposed Board action needed **	Adjusted FY 2024 Ending Balance
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Rate Stabilization Fund	1,000,000		1,000,000
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Discretionary Reserve	$ 2,304,995	(97,250)	$ 2,207,745
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Scottsville Wastewater			
Discretionary Reserve	$ 86,345	(8,450)	$ 77,895
Capital Fund			
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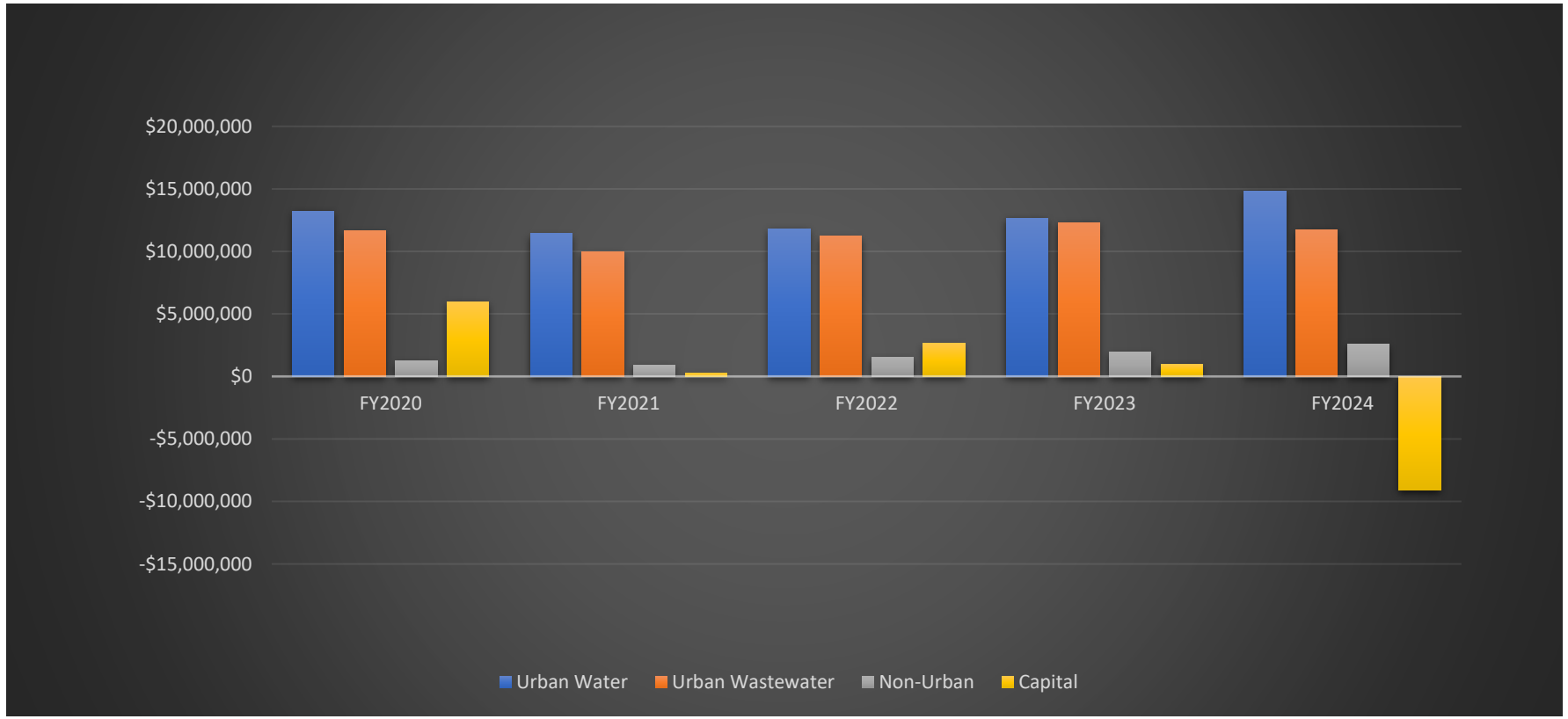
Total Reserves	* **$ 21,496,505**		**$ 20,323,505**

*** - Agrees to investment balances - audited.**

**** - Proposed Board action**

DISCRETIONARY RESERVES



DISPOSITION OF RATE CENTER RESULTS

	FY2024	FY2023	FY2022	FY2021	FY2020
Urban Water	**$ (830,900)**	$ (1,116,400)	$ (302,200)	$ (473,900)	$ (432,300)
Crozet Water	**(97,250)**	(210,200)	(115,900)	(107,700)	117,500
Scottsville Water	**(88,350)**	(78,200)	(64,600)	18,800	64,500
Urban Wastewater	**(120,500)**	(981,300)	(31,500)	869,900	153,000
Glenmore Wastewater	**(27,550)**	(22,000)	(53,800)	(3,800)	(25,500)
Scottsville Wastewater	**(8,450)**	(22,100)	(14,400)	(2,900)	27,600
	$ (1,173,000)	$ (2,430,200)	$ (582,400)	$ 300,400	$ (95,200)

BOARD ACTION: APPROVE FUND TRANSFER

We request authorization to transfer funds to the Operations Account from the respective reserves for FY24 year-end results as shown below:

Urban Water	(830,900)	Urban Wastewater	(120,500)
Crozet Water	(97,250)	Glenmore Wastewater	(27,550)
Scottsville Water	(88,350)	Scottsville Wastewater	(8,450)

QUESTIONS ?

RIVANNA WATER & SEWER AUTHORITY
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MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS

FROM: JENNIFER A. WHITAKER, DIRECTOR OF ENGINEERING AND MAINTENANCE

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: APPROVAL OF CONSTRUCTION CONTRACT AWARD AND CAPITAL IMPROVEMENT PLAN AMENDMENT– RAGGED MOUNTAIN RESERVOIR TO OBSERVATORY WATER TREATMENT PLANT RAW WATER LINE & PUMP STATION – THALLE CONSTRUCTION COMPANY, INC.

DATE: OCTOBER 22, 2024

This request is to authorize award of a contract to Thalle Construction Company, Inc. to construct four miles of 36" ductile iron pipe and a 10 million gallons per day (mgd) raw water pump station for a total value of $53,908,400. An amendment to increase the FY 25-29 CIP funding for these projects totaling $15,640,000 is also recommended. The total budget for these projects will be $61,490,000. The project will also include construction of 1000 LF of 12" piping for the ACSA, who will provide $600,000 in reimbursement.

Background

Raw water is currently transferred from the Ragged Mountain Reservoir (RMR) to the Observatory Water Treatment Plant (OBWTP) by way of two 18-inch cast iron water lines which have been in service for more than 110 and 70 years, respectively. Replacement of these pipes is required to increase the water transfer capacity between the RMR and OBWTP and utilize the recent treatment expansion at OBWTP from 7.7 to 10 MGD, as well as to increase the reliability of this infrastructure which is critical to our community's water supply. There has been an increased frequency of emergency repairs on the existing vintage raw water mains in recent years, necessitating replacement of these water lines with a single, new raw water main. This new raw water main will be constructed of 36-inch ductile iron pipe and will span approximately four miles, including the connection of the proposed Ragged Mountain Raw Water Pump Station (RMRWPS) with the southern terminus of the SFRR-RMR raw water line constructed adjacent to the Birdwood Golf Course in 2019.

The existing Stadium Road and Royal Raw Water Pump Stations are both many decades old, have exceeded their design life expectancy, and would require significant upgrades for continued long-term operation to meet the new capacity of OBWTP. The RMRWPS has been designed to replace these two pump stations and will initially be able to reliably pump up to 10 MGD to the expanded Observatory WTP. RMRWPS will also be later integrated under a separate contract with the

planned South Fork Rivanna Reservoir (SFRR) to RMR pipeline project for improved operational flexibility and cost efficiency. This integrated pump station will include the capacity to transfer up to 16 MGD of raw water from RMR back to the South Rivanna WTP, as well as to boost water supply from SFRR to RMR and OBWTP.

It was decided that these two projects would be bid together given the amount of coordination required between the raw water main and pump station construction, as well as to increase the overall size of the project and draw interest from larger contractors. After completion of a Value Engineering process, an Invitation for Bids was issued on August 20, 2024. A pre-bid conference was held on September 5, 2024. Construction bids were opened for the project on October 1, 2024. Two competitive bids were received for the project with total base bids of $56,532,000 and $59,020,000. The apparent low bidder was Thalle Construction Company, Inc. from Hillsborough, North Carolina with a total base bid of $56,532,000.

Our design engineer, Kimley-Horn, has reviewed the bid documents submitted by Thalle and verified that the bid and attached documents are both responsive and responsible. Thalle's base bid was 16% higher than the Engineer's estimate of $48,724,600. This has been attributed to the continued high workload of contractors statewide and regionally, as well as high pricing received from material vendors due to continued high demand and inflation (especially for piping, fittings, and building-related materials). As the apparent low-bid from Thalle would have required a total CIP budgetary increase in excess of $20,000,000, RWSA and Kimley-Horn staff worked with Thalle to identify areas for potential cost savings. As a result of these cost-saving opportunities, Thalle reduced its bid by $2,623,600 to $53,908,400.

Thalle is a large, national, utility and heavy civil contractor and has completed and is currently working on many large infrastructure projects across the Southeast. In addition, Thalle was the General Contractor who completed the New Ragged Mountain Dam Project for RWSA in 2014. Given that staff experience from that project was positive, Thalle's overall experience as a respected, large utility contractor, Thalle's willingness to work with RWSA and Kimley-Horn to find cost-savings opportunities, and the overall status of market conditions, Kimley-Horn and staff recommend an award to Thalle in the amount of $53,908,400. Change Order No. 1 will accompany the Contract Documents, formally accepting the cost savings opportunities mentioned above as a deduction from the total base bid value.

The current CIP budgets for the RMR-OBWTP Pipeline and RMRWPS are $33,500,000 and $12,350,000 respectively, for a total budget of $45,850,000. Incorporating Thalle's bid would represent an additional increase to the CIP budget of $15,640,000 for a total between the two projects of $61,490,000. Based on the range of bid prices received, Kimley-Horn and staff believe that the modified bid is reasonable based on current market value for the work.

It should also be noted that the recommended award includes approximately 1,075 linear feet of new 12" ductile iron piping to be installed for the Albemarle County Service Authority (ACSA), totaling $600,000. While this is accounted for in the RWSA CIP Budget, ACSA will be reimbursing these costs to RWSA.

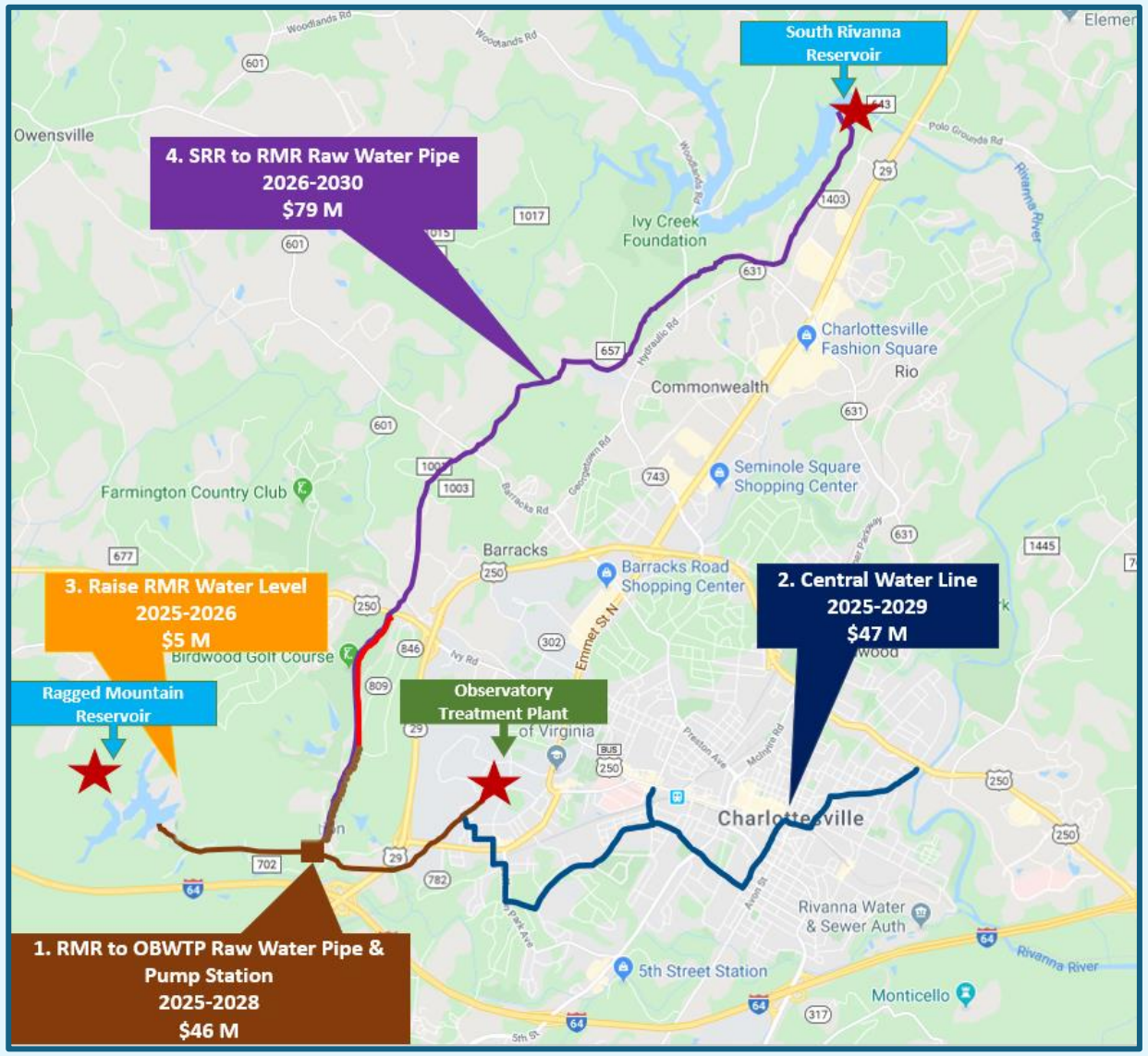
Board Action Requested:

Staff requests the Board of Directors to approve the following:

1. Authorization for the Executive Director to award a construction contract to Thalle Construction Company, Inc. for a total value of $53,908,400 and any change orders to the construction contract necessary for completion of the work not exceed 10% of the original construction contract award.
2. An amendment to the FY 25 – 29 CIP for the Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line project to increase the budget by $7,260,000. This amendment would bring the total budget for this project to $40,760,000.
3. An amendment to the FY 25 – 29 CIP for the Ragged Mountain Raw Water Pump Station project to increase the budget by $8,380,000. This amendment would bring the total budget for this project to $20,730,000.

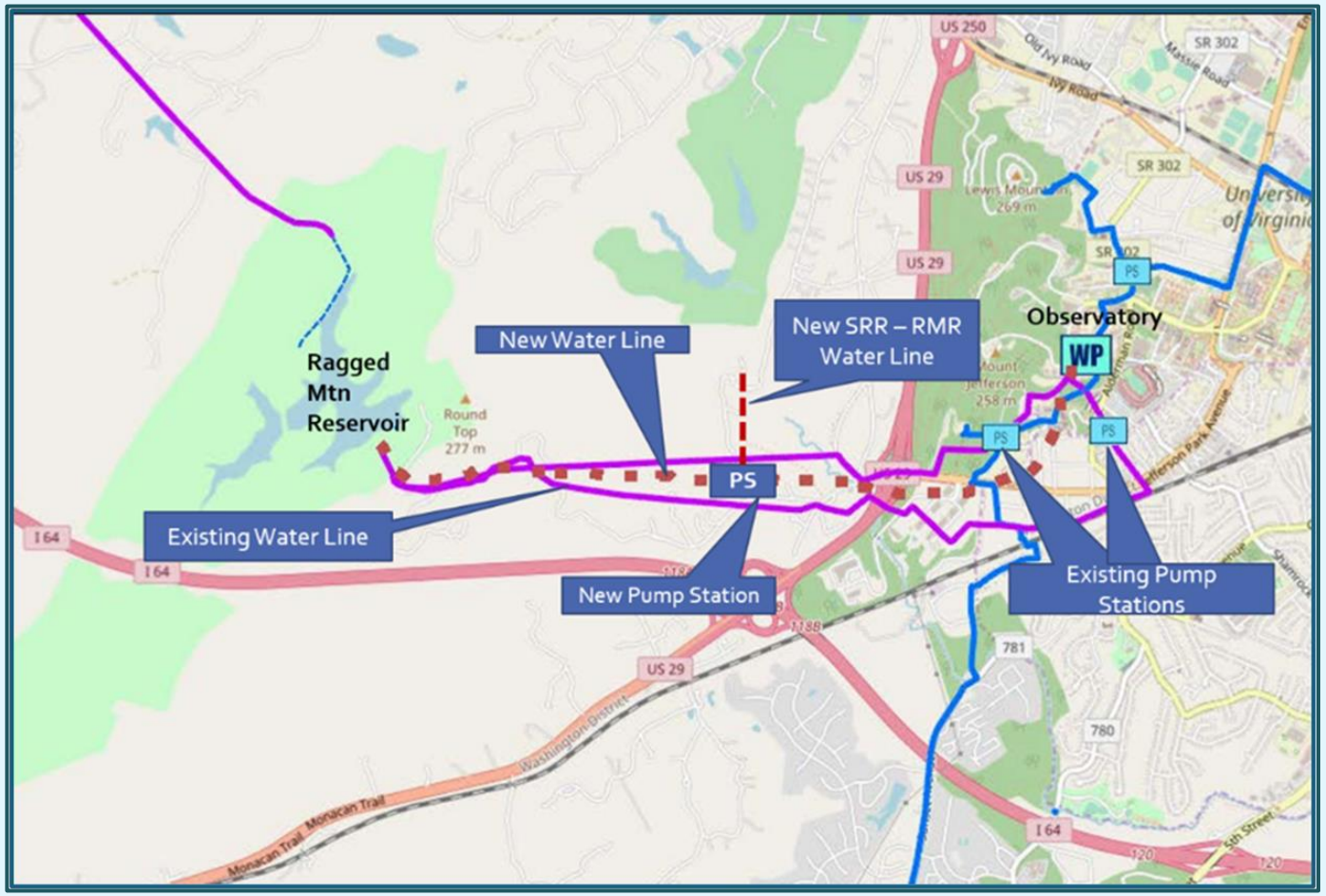
Ragged Mtn Reservoir to Observatory WTP Pipeline and Pump Station Project

Construction Award and FY 25 – 29 CIP Amendment



Presented to the Board of Directors
By Jennifer Whitaker
Director of Engineering and Maintenance

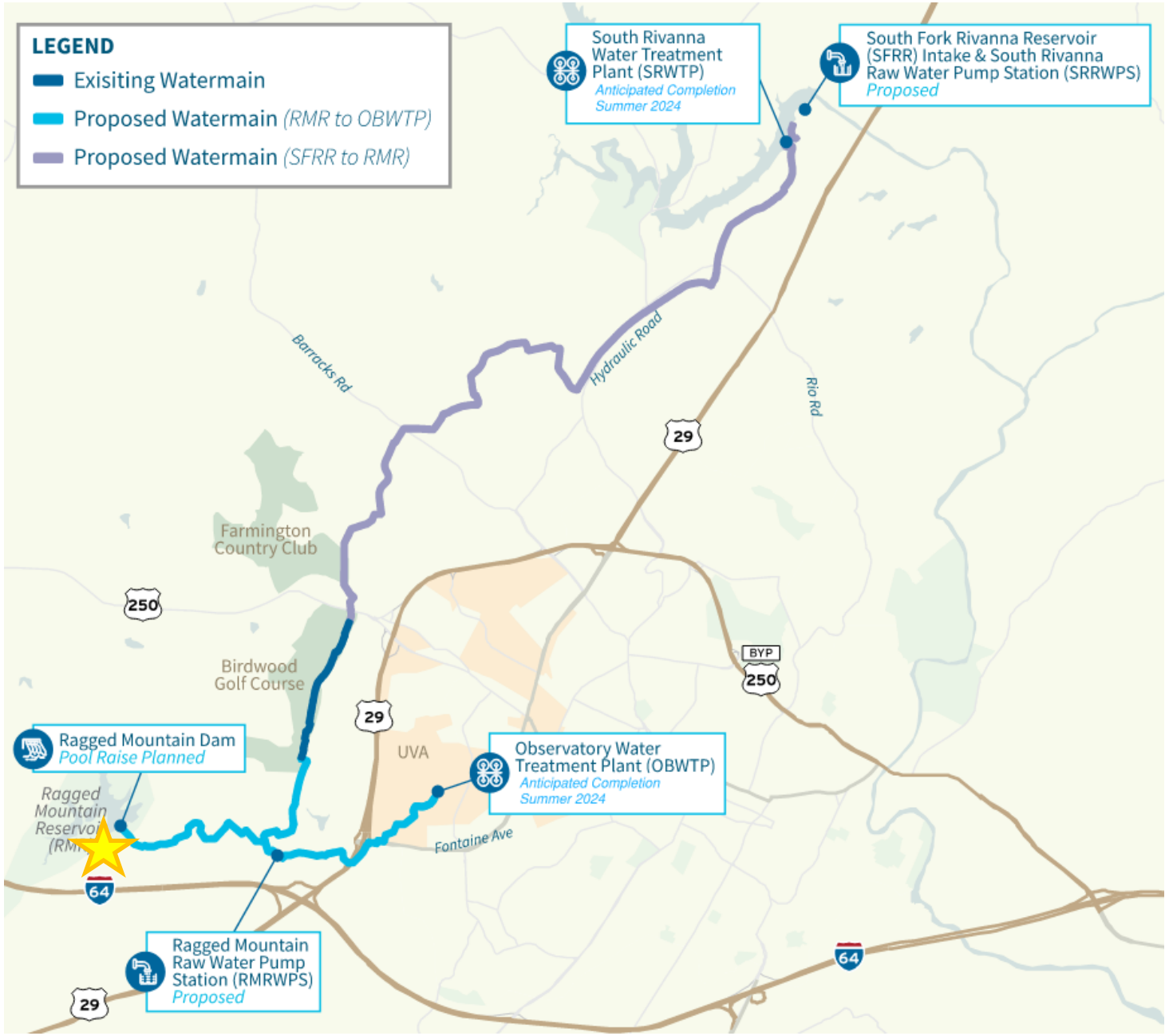
Ragged Mtn Reservoir to OBWTP – Water Line and Pump Station



- Replaces outdated infrastructure – 40- and 70-year-old pump stations (2) and 70–110-year-old water lines
- Improves raw water conveyance capacity to OBWTP
- 4 miles of 36" pipe; 10/26 mgd pump station
- Construction: January 2025 – June 2029
- Budget $61.5 M

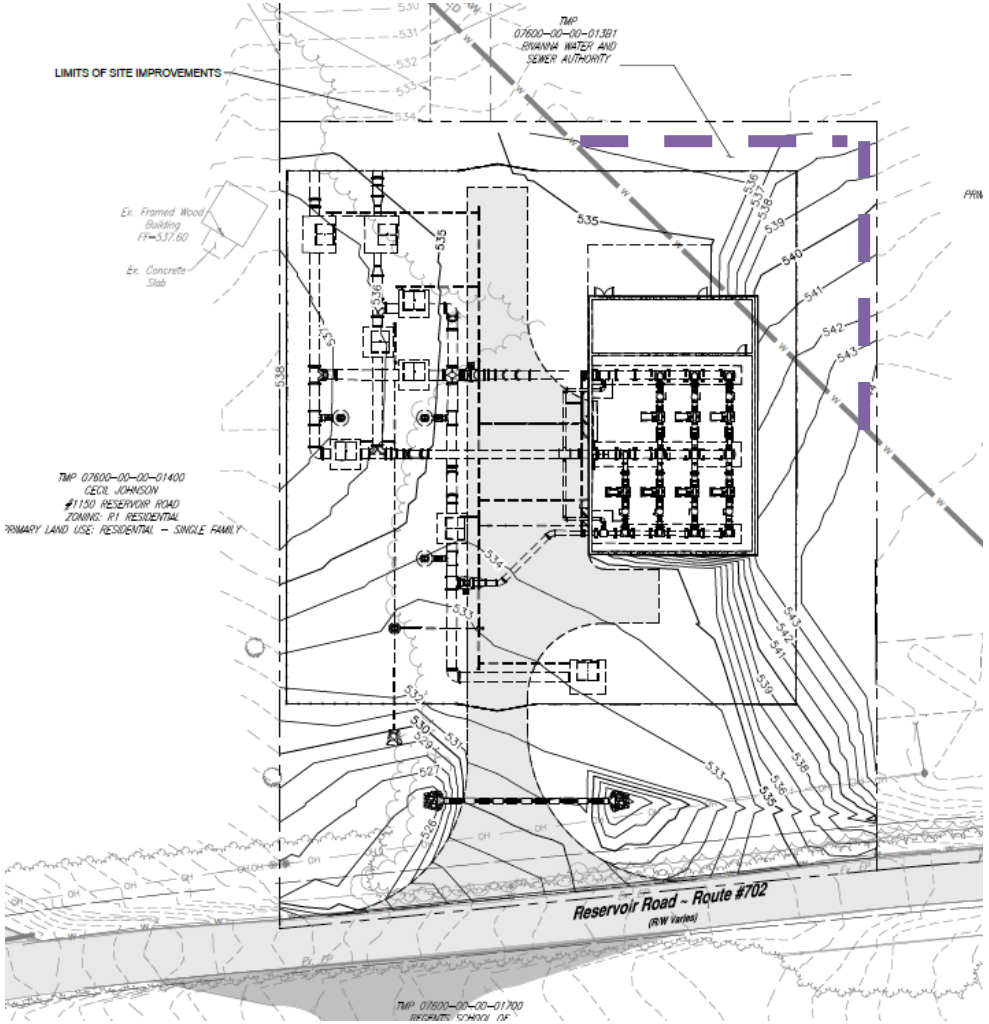
Community's Water Supply Plan

- 10/26 MGD Ragged Mountain Raw Water Pump Station (RMRWPS)
- Ragged Mountain Reservoir to Observatory Water Treatment Plant 36-inch Raw Watermain (RMR to OBWTP 36-inch WM)
- 30 MGD South Fork Rivanna Reservoir Intake and Raw Water Pump Station (SRRWPS)
- South Fork Rivanna Reservoir to Ragged Mountain Reservoir 36-inch Raw Watermain (SFRR to RMR 36-inch WM)



RIVANNA WATER & SEWER AUTHORITY

Ragged Mountain Raw Water Pump Station – Site Overview



Designed to Transfer up to 26 MGD

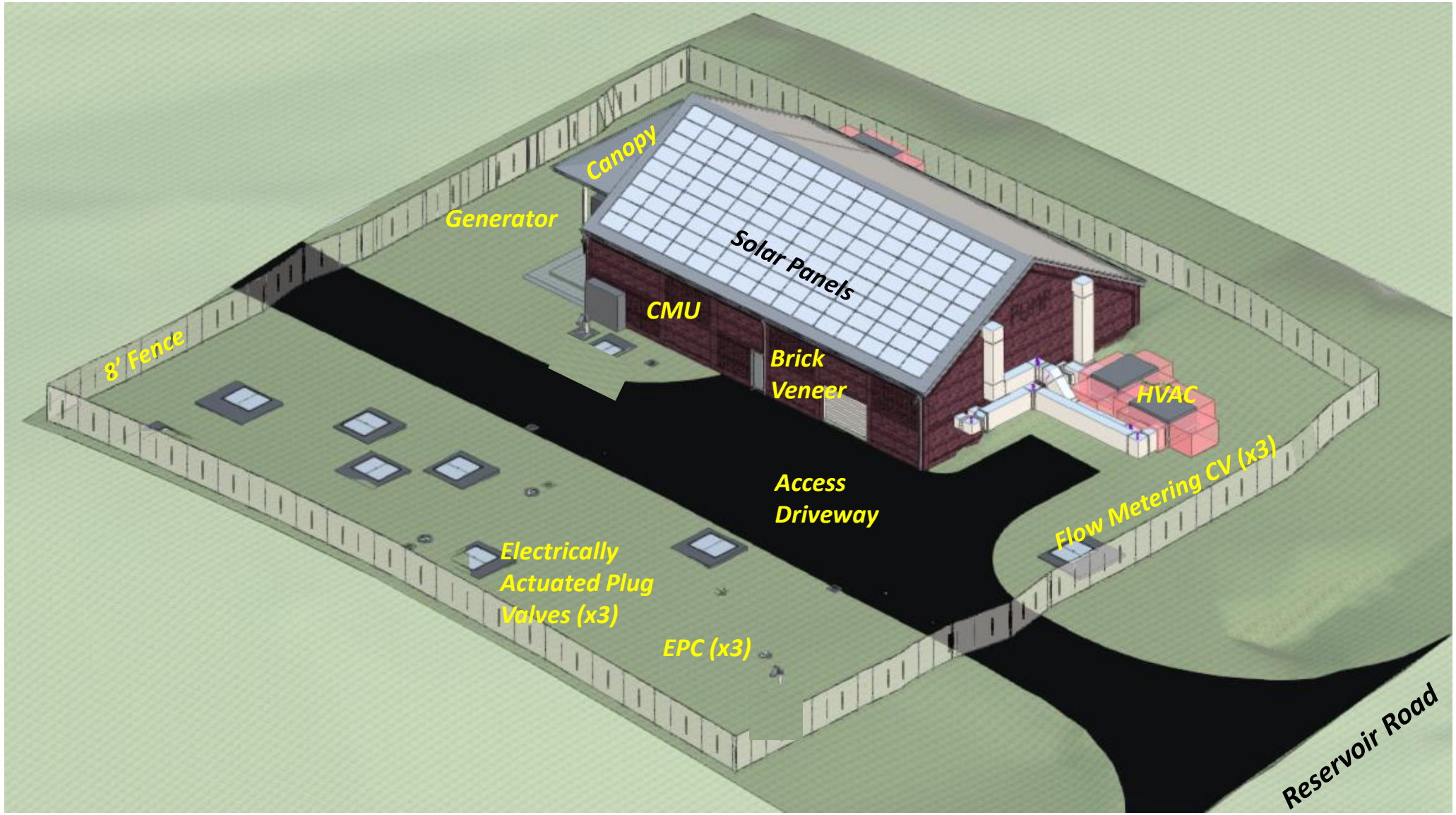
From SFRR to RMR and/or OBWTP

From RMR to SRWTP and/or OBWTP

- Located on approx. 1.2 Acre site
- 5,400 s.f. Climate Controlled Building
- Brick Veneer on CMU load bearing walls
  - w partially buried conc retaining wall.
- Solar Panels
- 20”, 30” Suction/Discharge piping
- 7 VFD pumping units (*3 units will not be installed under this contract*)
- 8 Valve Vaults
- 550 KW Emergency Generator
- Drainage piping network/sump pump
- Relocate 18-inch Raw Watermain

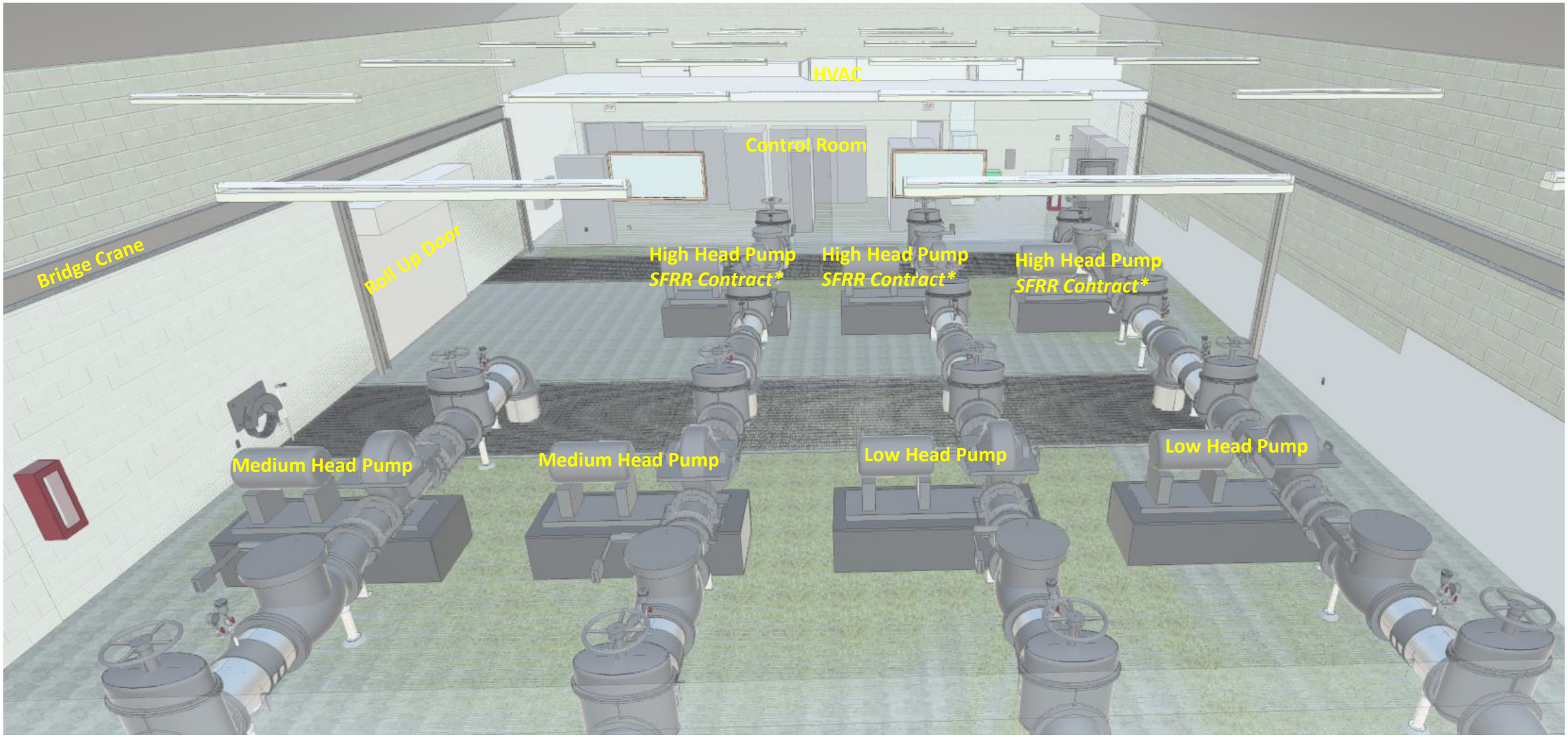
RIVANNA WATER & SEWER AUTHORITY

Ragged Mountain Raw Water Pump Station – Site Overview



RIVANNA WATER & SEWER AUTHORITY

Ragged Mountain Raw Water Pump Station – Interior Overview



RIVANNA
WATER & SEWER AUTHORITY

RMR to OBWTP Watermain: 21,000 LF 36” DIP

RIVANNA WATER & SEWER AUTHORITY

Construction Bids:

	Thalle	English	Engineer Estimate
	$56.53 M	$59.02 M	$48.72 M
Reductions	$2.62 M		
	$53,908,400		

FY 25 – 29 CIP Budgets:

		Amendment	*Total*
Pipeline:	$33.5 M	+ $7.26 M	= $40.76 M
Pump Station:	$12.35 M	+$8.38 M	= $20.73 M
Total:	$45.85 M	$15.64 M	= $61.49 M

Questions?

Board Action Requested:

Staff requests the Board of Directors to approve the following:

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3. An amendment to the FY 25 – 29 CIP for the Ragged Mountain Raw Water Pump Station project to increase the budget by $8,380,000. This amendment would bring the total budget for this project to $20,730,000.

MCAWRRF - RWWPS

Major Capital Projects Update

Presented to the Board of Directors

By Scott Schiller, Engineering Manager

October 22, 2024

Under Construction

Rivanna Pump Station Restoration

Rivanna PS – January 2024

- Controls malfunction during wet weather event on January 9, 2024 resulted in inundated dry well and damage
- Major bypass pump setup established to maintain flow and allow for rehab efforts
- Working with Hazen and Sawyer, SEH and MEB to collaboratively design and perform pump station rehab and identified improvements
- Completion: March - May 2025
- Budget $20-22M, restoration reimbursement from VRSA (est.$10.5 M)

Rivanna PS – September 2024

MC 5kv Electrical System Upgrade

- Replacement of major electrical components at the end of their service lives
- Includes motor control centers, transformers, switchgear building
- Significant equipment delivery delays and existing duct bank issues
- Completion: June 2025
- Budget $5.6 M

Concrete Pad for Switchgear Building

New Switchgear Building

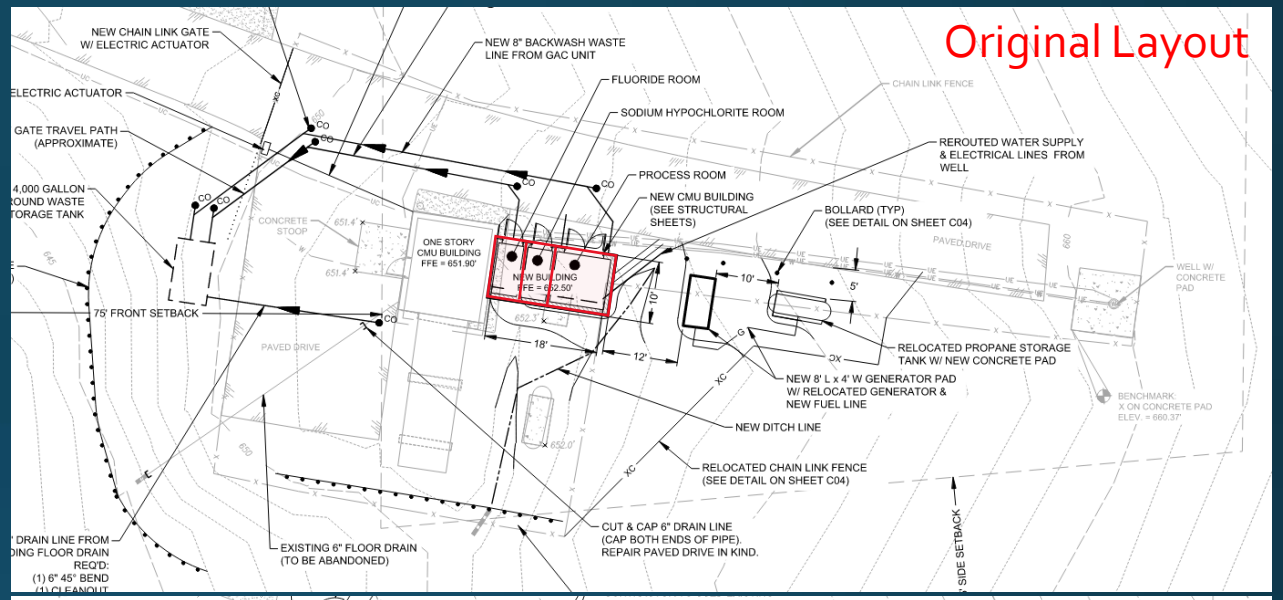
Airport Road Pump Station and Piping

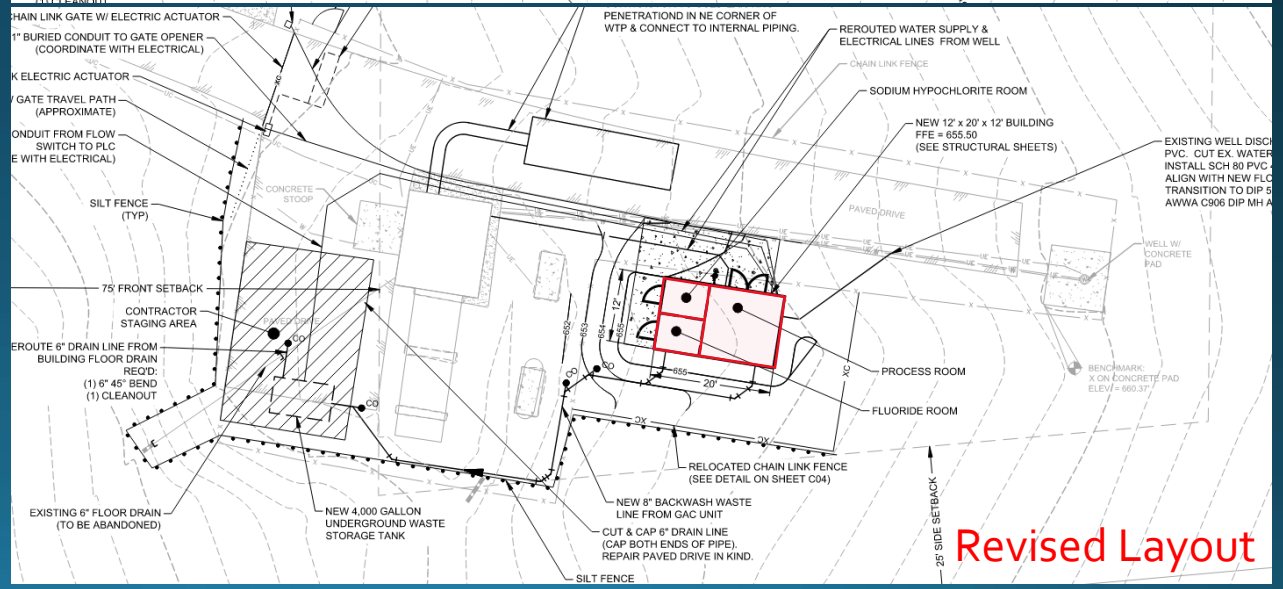
- Will reliably connect Piney Mountain and Urban water pressure zones
- Will supply treated water to the Piney Mountain Tank and be part of future Airport water pressure zone
- Completion – October 2024
- Budget $10 M

Completed Pump Station

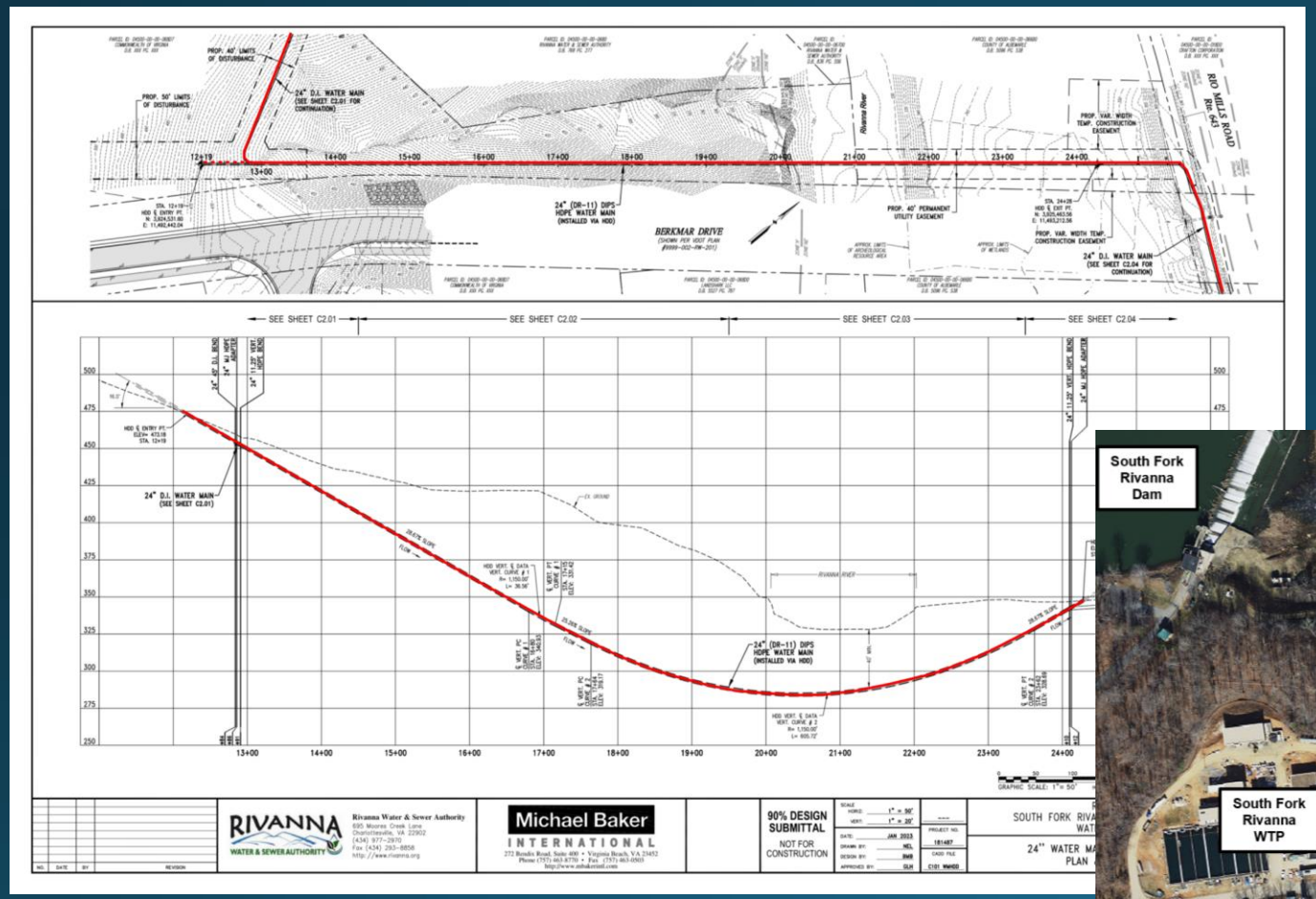
Red Hill WTP Upgrades

- Space for additional chemical storage, monitoring and automation equipment
- Granular Activated Carbon treatment will be added
- Construction: Oct 2024 – March 2026
- Budget $2M; 100% ACSA w/ $400k from County

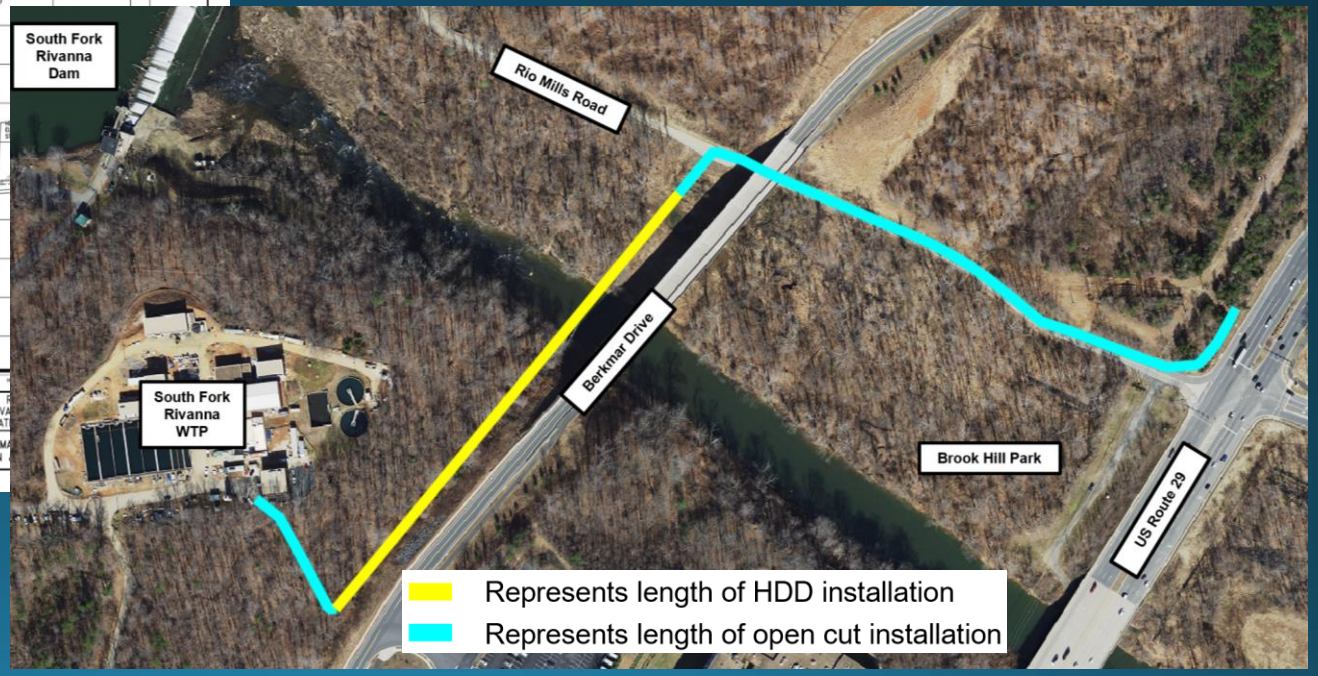




South Fork Rivanna River Crossing

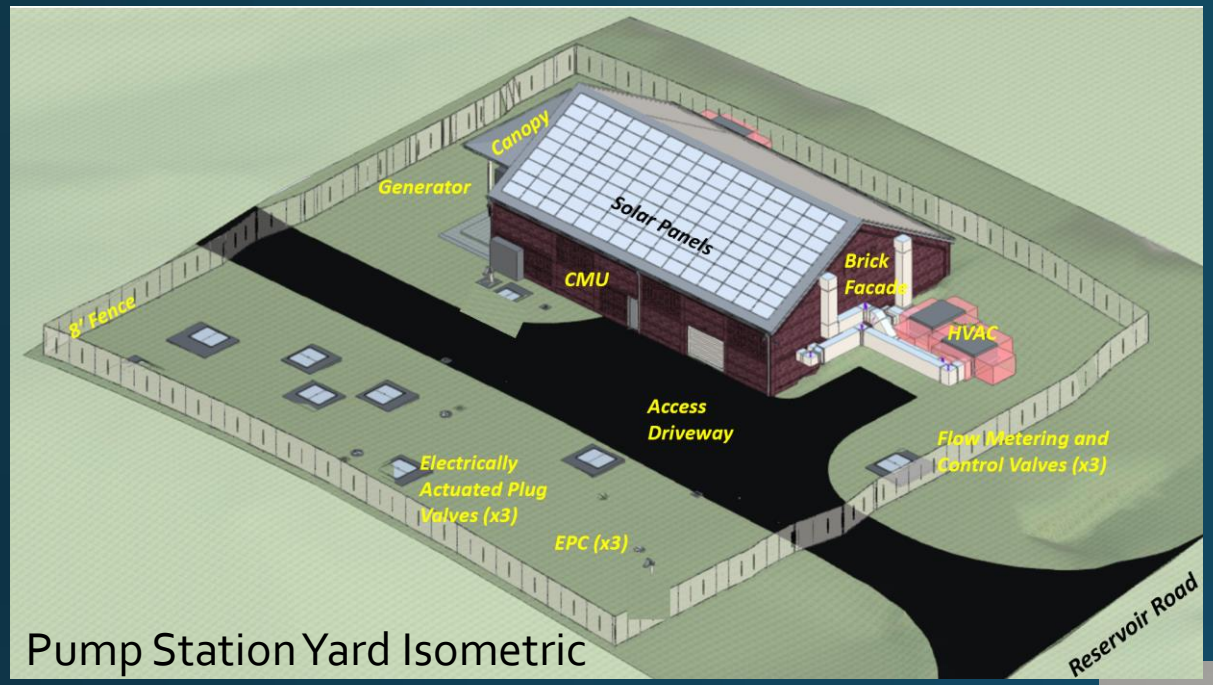


- Second pipe, high density polyethylene, drilled under the South Rivanna River
- Awarded to Faulconer Construction
- Construction: January 2025 - January 2027
- Budget $7.3M

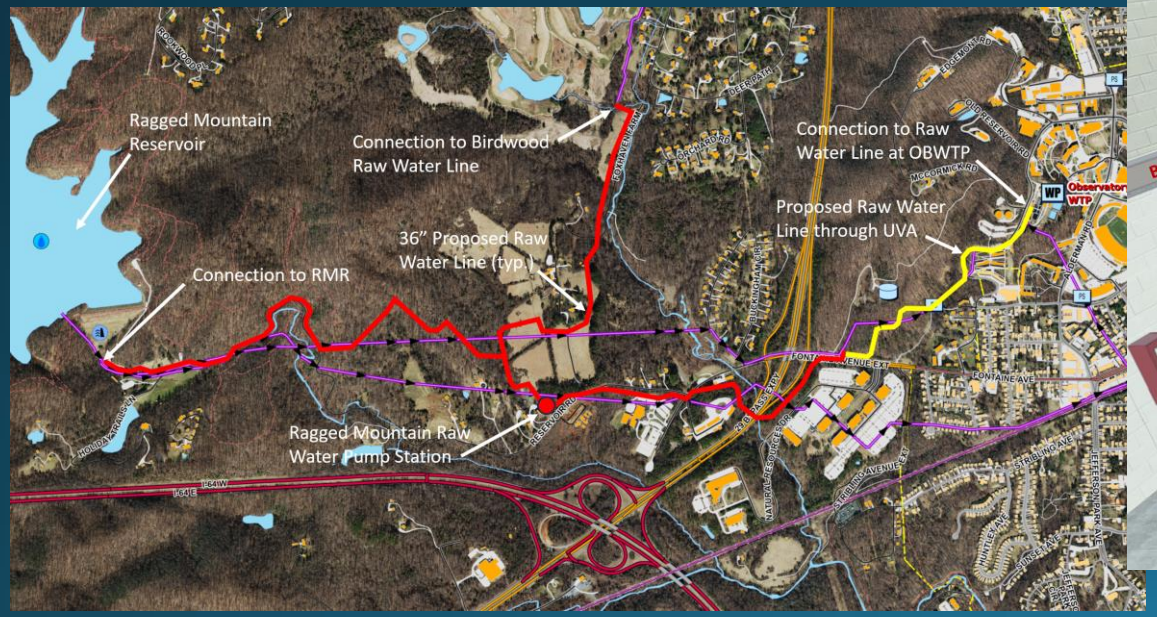


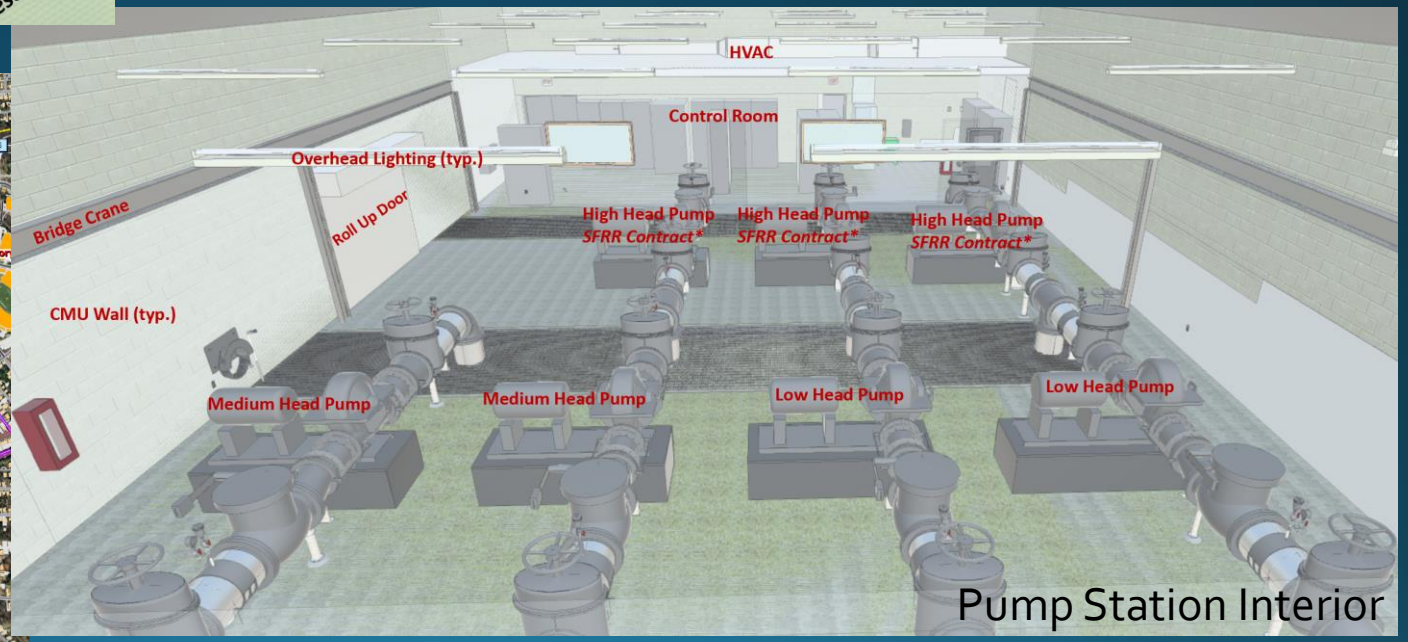
Ragged Mtn Reservoir to OBWTP – Water Line and Pump Station

- Replaces outdated infrastructure – 40- and 70-year-old pump stations (2) and 70–110-year-old water lines
- Improves raw water conveyance capacity to OBWTP
- 4 miles of 36" pipe; 10 mgd raw water pump station
- Construction: January 2025 – June 2029
- Budget $61.4 M



Pump Station Yard Isometric

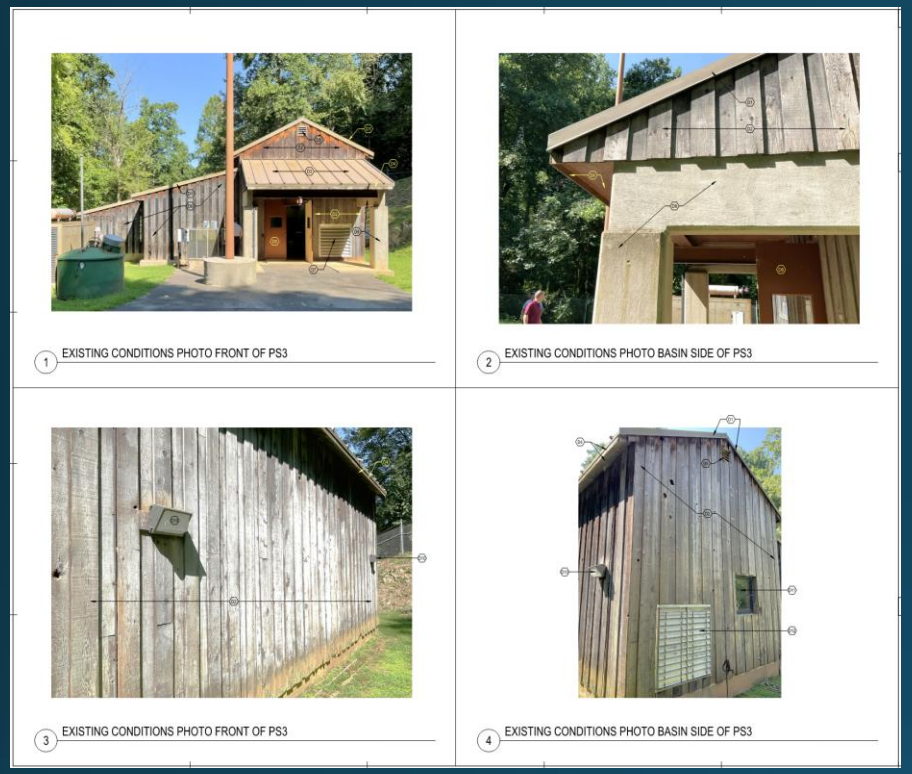


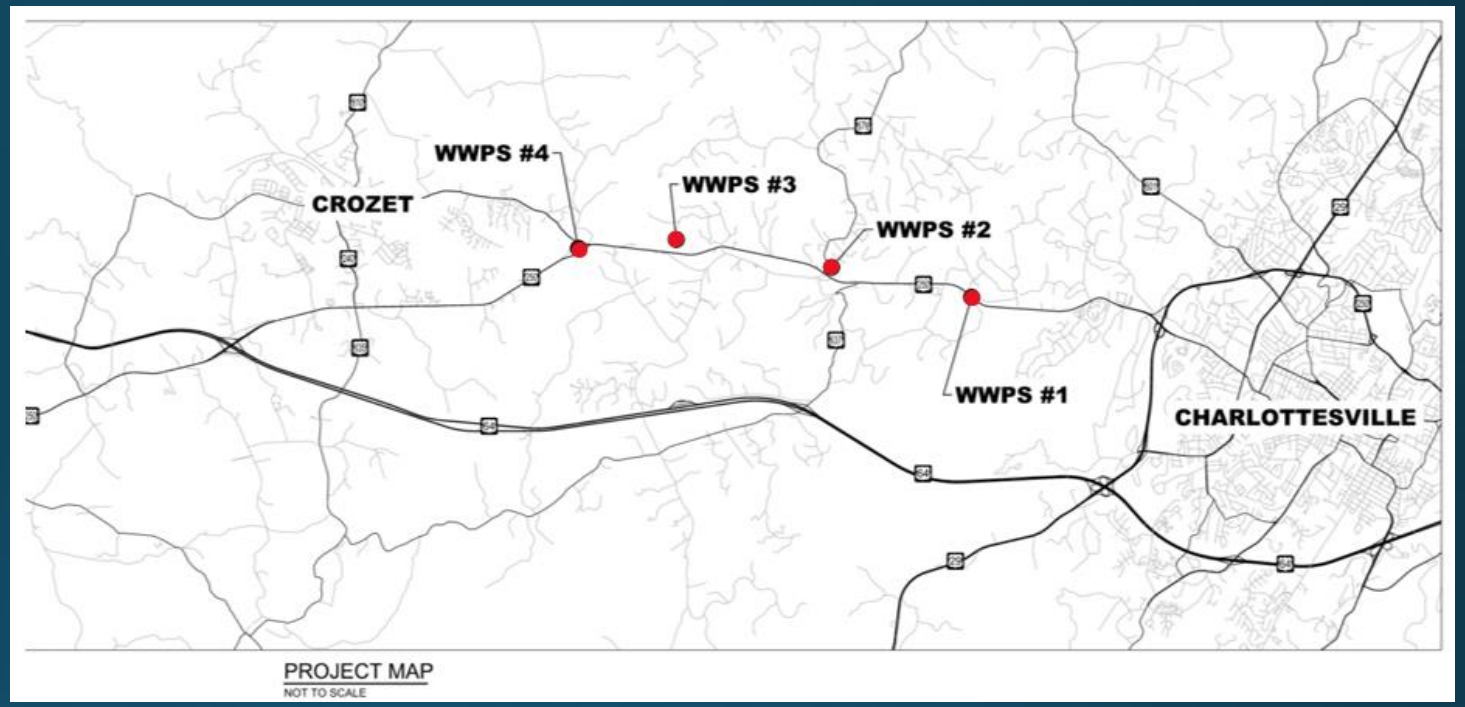


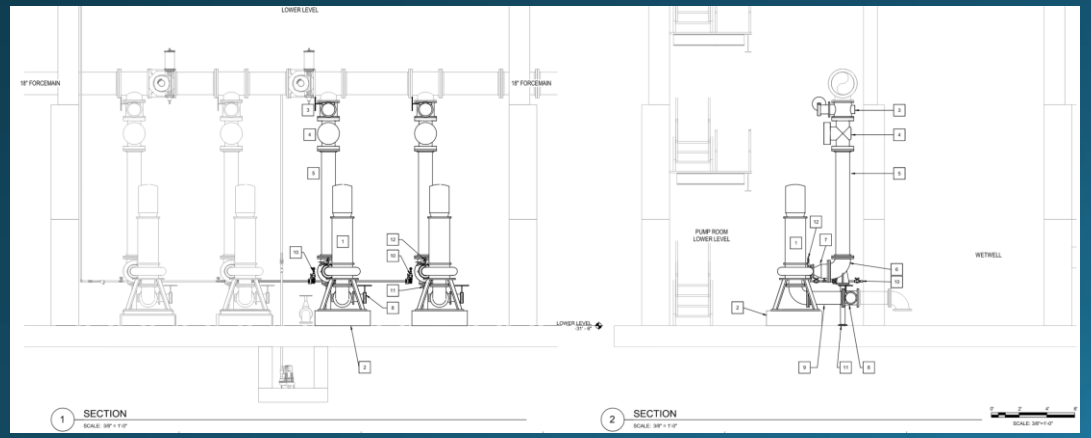
Pump Station Interior

Design Phase and Upcoming Construction Projects

Crozet Pump Stations Rehabilitation



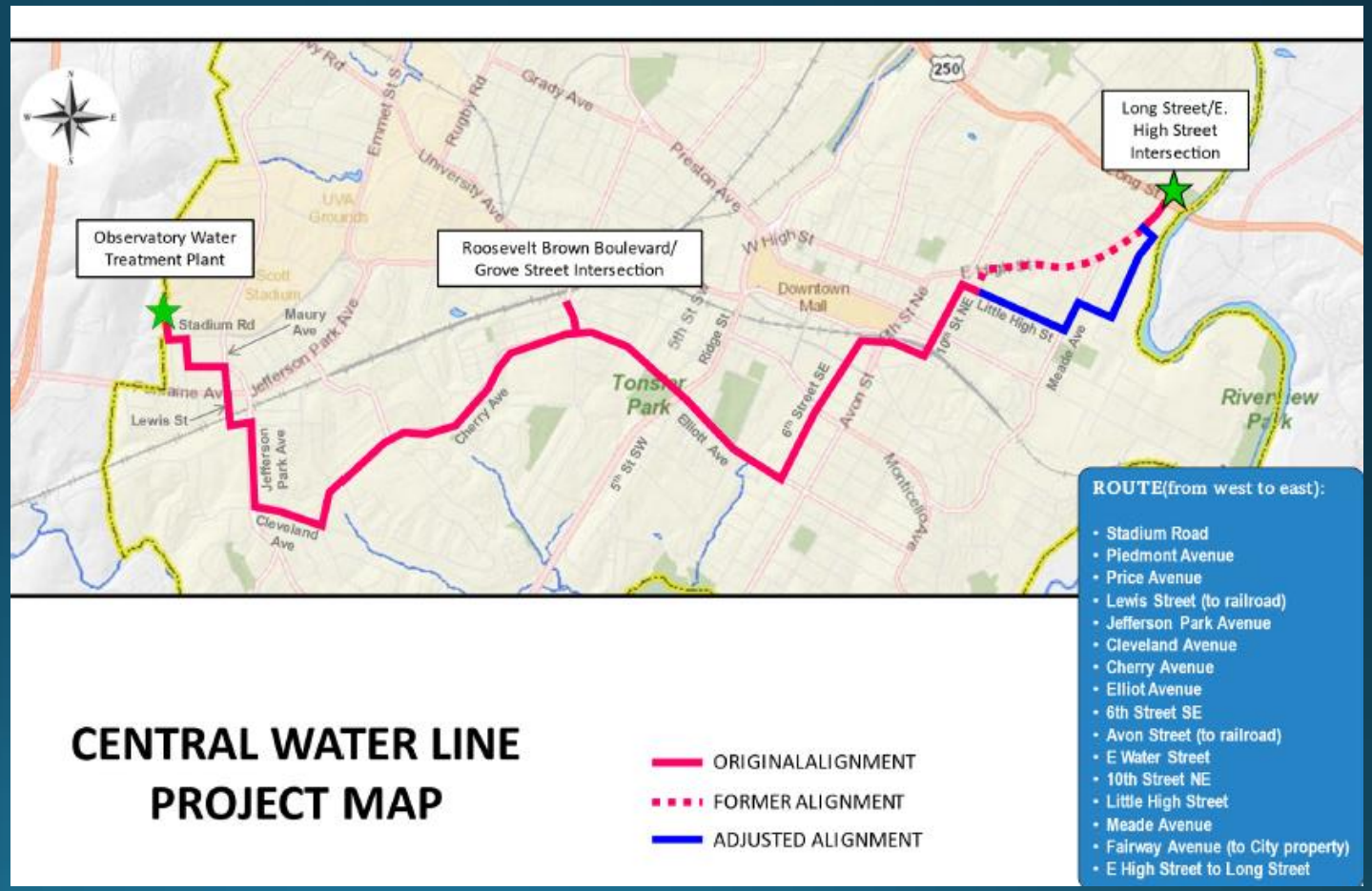




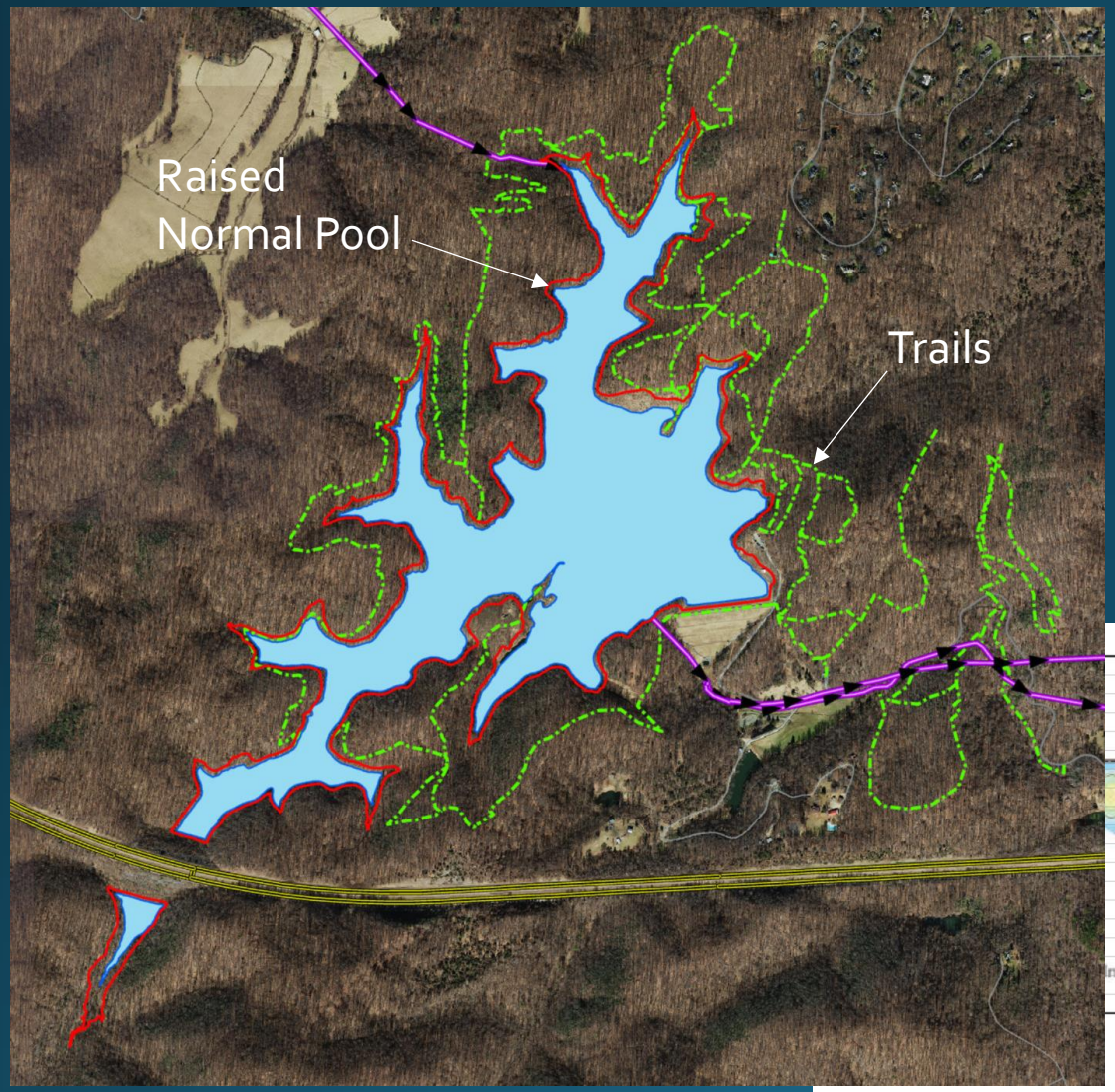
- Repair of 4 wastewater pump stations constructed in 1980's
- Includes replacement of pumps and valves, roofs, motor control centers, generators, automatic transfer switches, PLCs and other architectural improvements
- Bids due October 31st
- Construction: April 2025 – September 2027
- Budget $11 M

Central Water Line

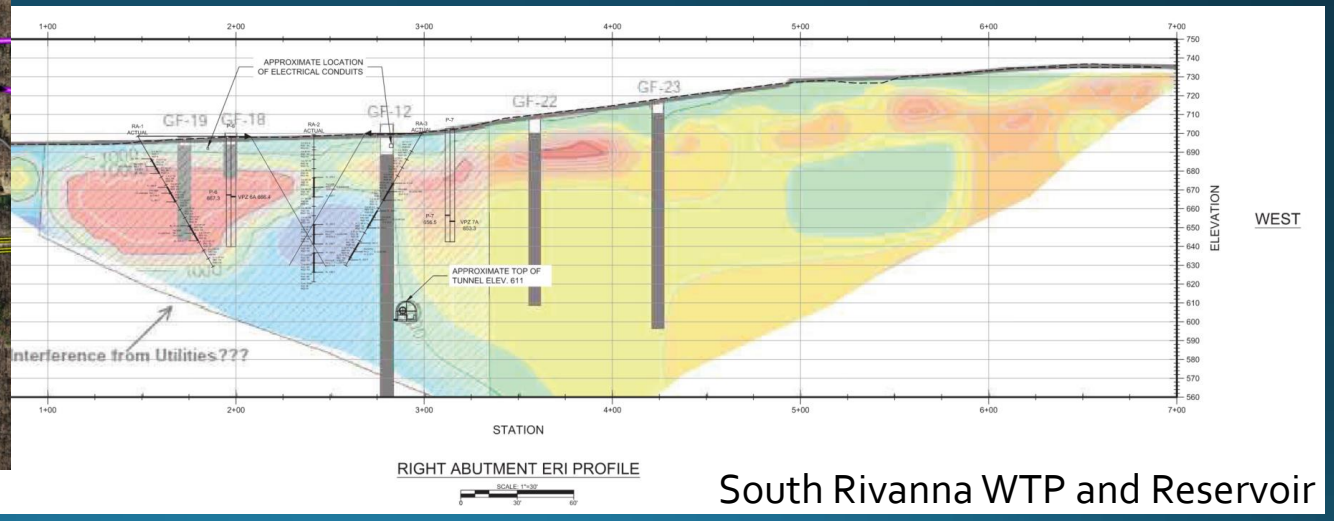
- Improve water flow, pressure, redundancy in Urban System
- 5 miles of 24 & 36" pipe; 2 crossings under railroad
- 90% design documents have been completed for Phase 1
- Phase 2 will include E. High St. reroute and is expected to bid next summer
- Construction for Phase 1: May 2025 – March 2029
- Budget $47 M



Ragged Mountain Reservoir Pool Raise

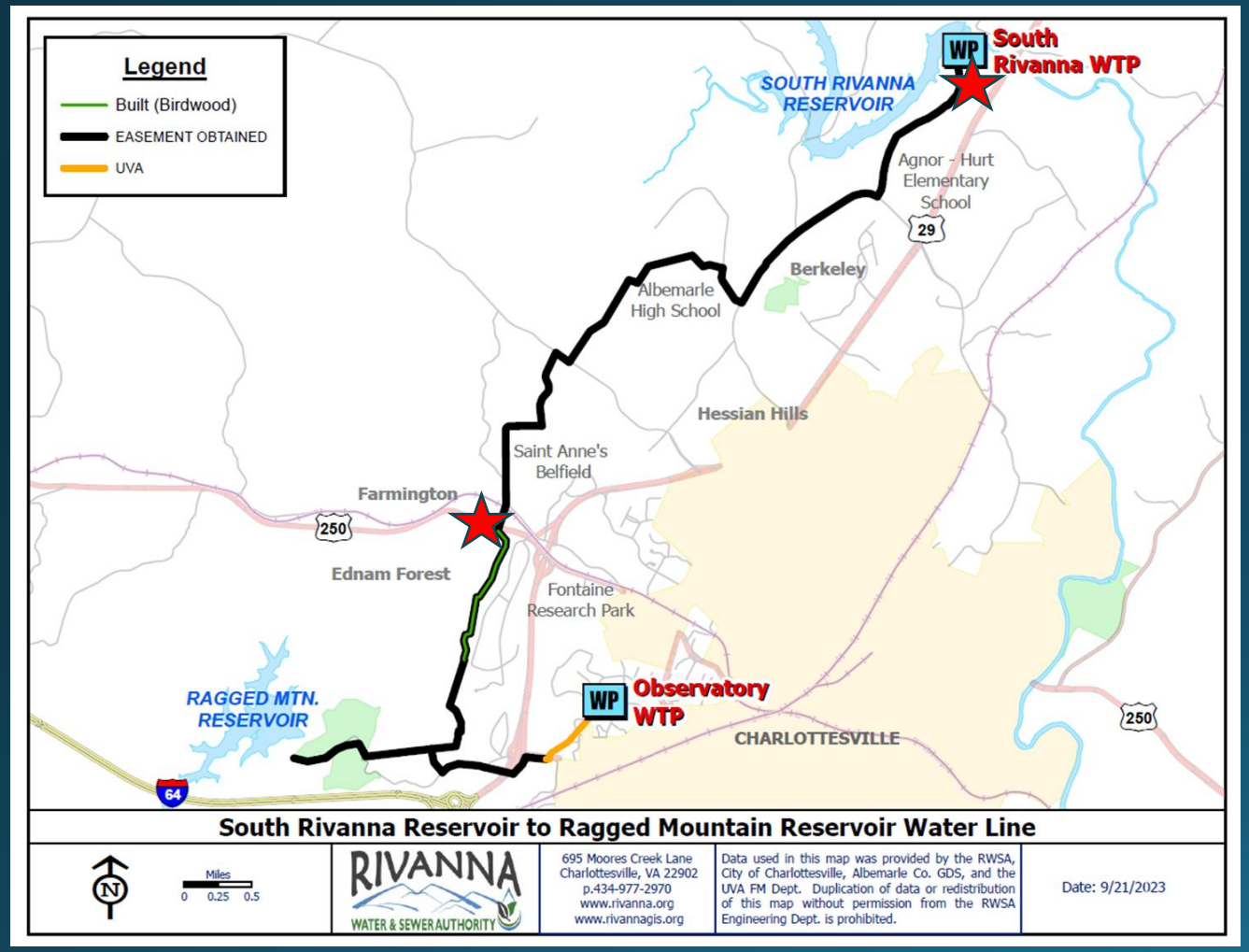


- Raises normal pool 12′, from El. 671 to El. 683
- Clearing around the reservoir and minor modifications to intake tower
- Performing geotechnical investigation on earthen dam to evaluate impacts
- 30% design
- Construction: Sept 2025 – Sept 2026
- Budget $5 M

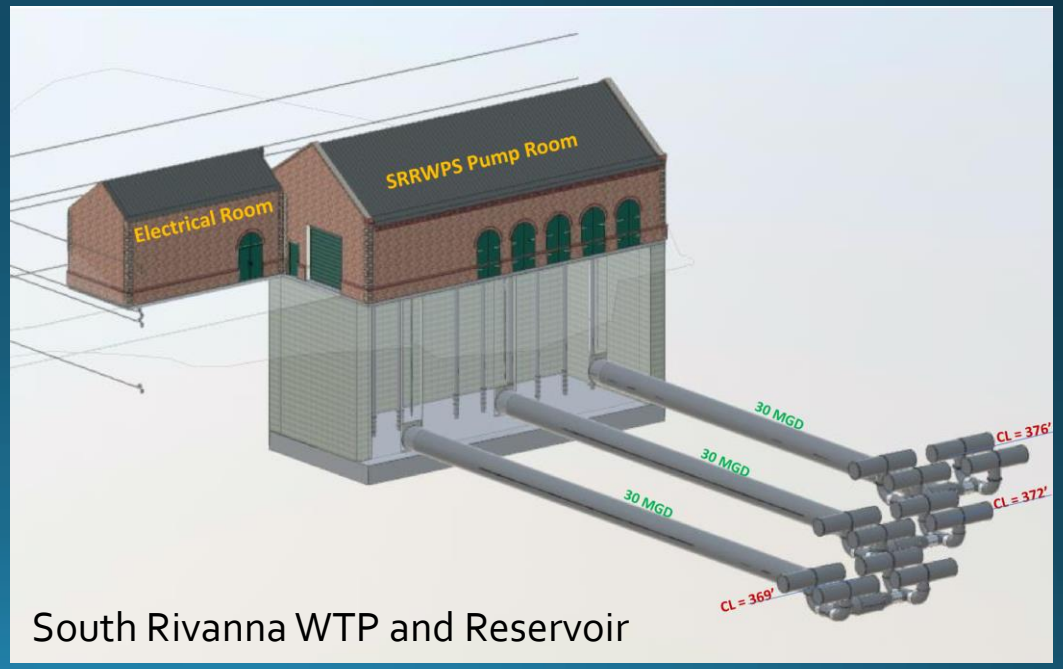


South Rivanna WTP and Reservoir

SFRR to RMR Pipeline, Intake, and Facilities



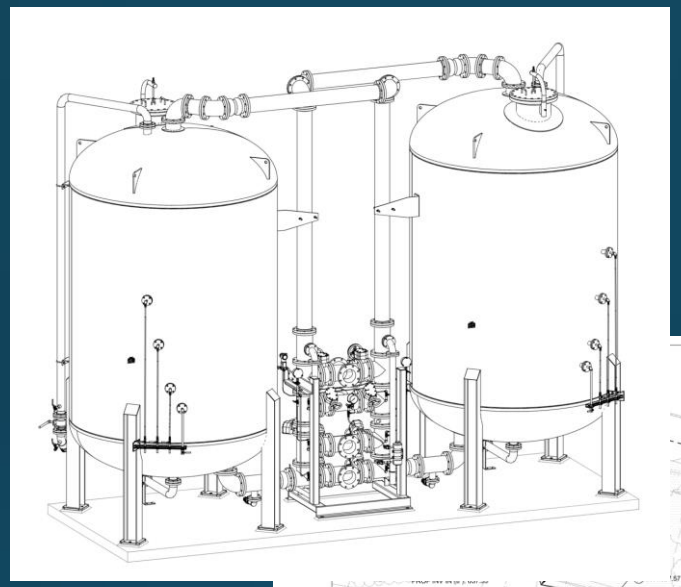
- 6 miles of 36" raw water transfer pipeline from SFRR to Birdwood
- 41 mgd raw water pump station and intake on SFRR
- Easements have been obtained
- 50% design
- Construction: Feb 2026 – Dec 2030
- Budget $80 M

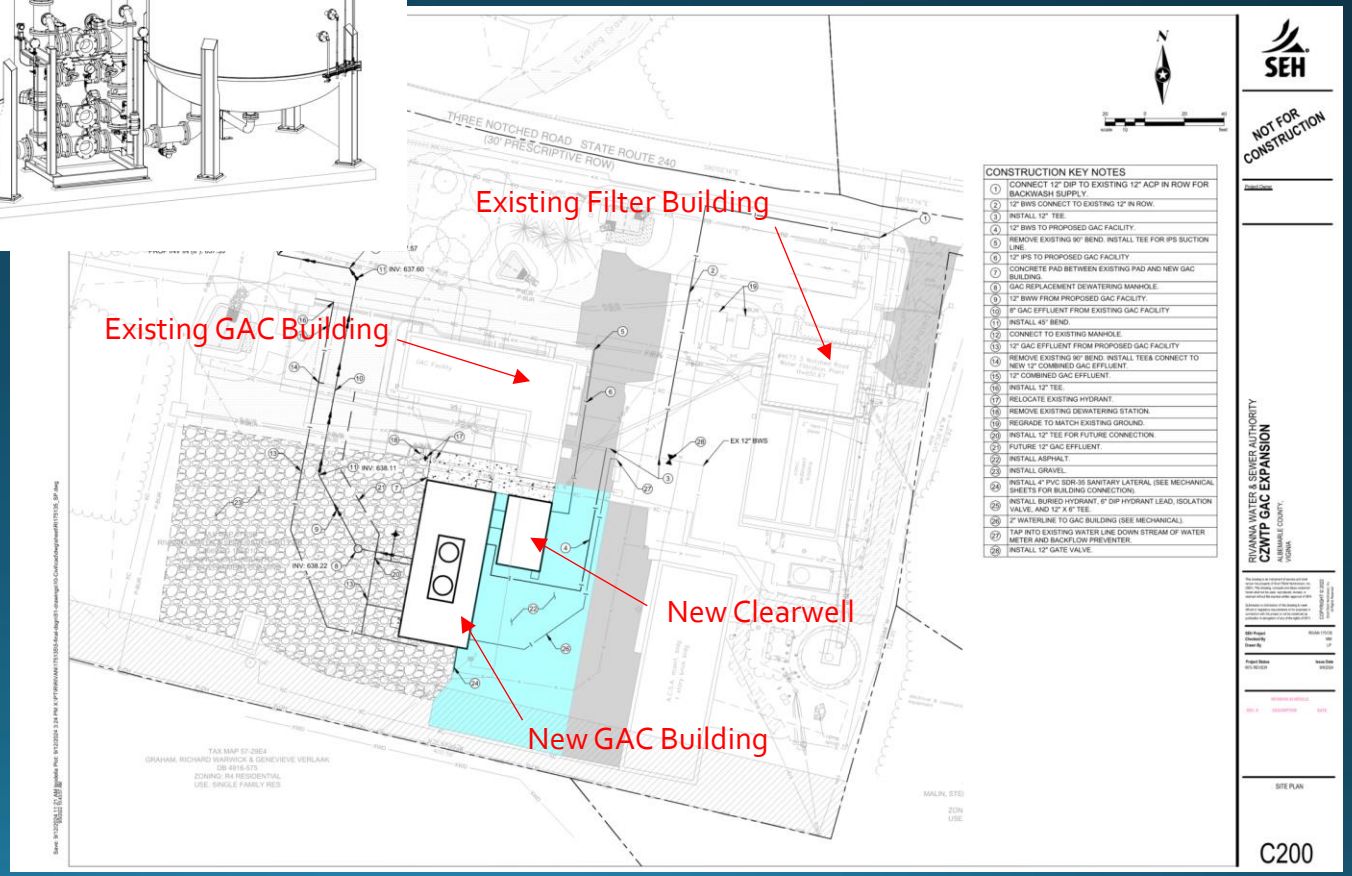


South Rivanna WTP and Reservoir

Granular Activated Carbon Expansion - Crozet WTP

GAC Vessels at Crozet WTP

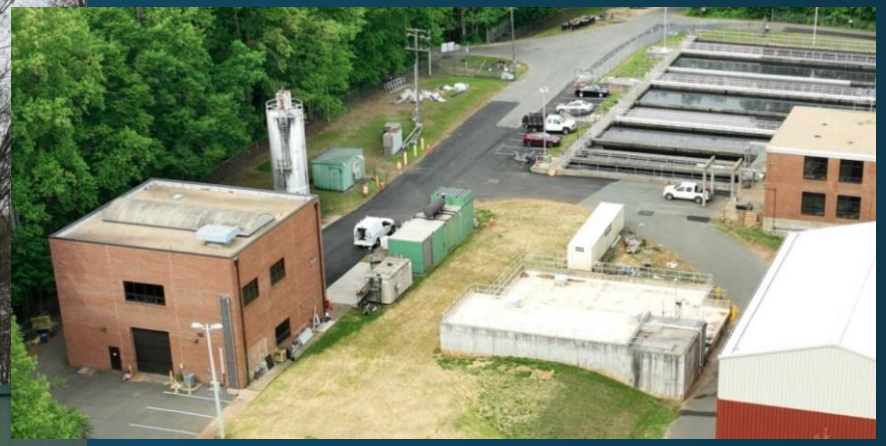


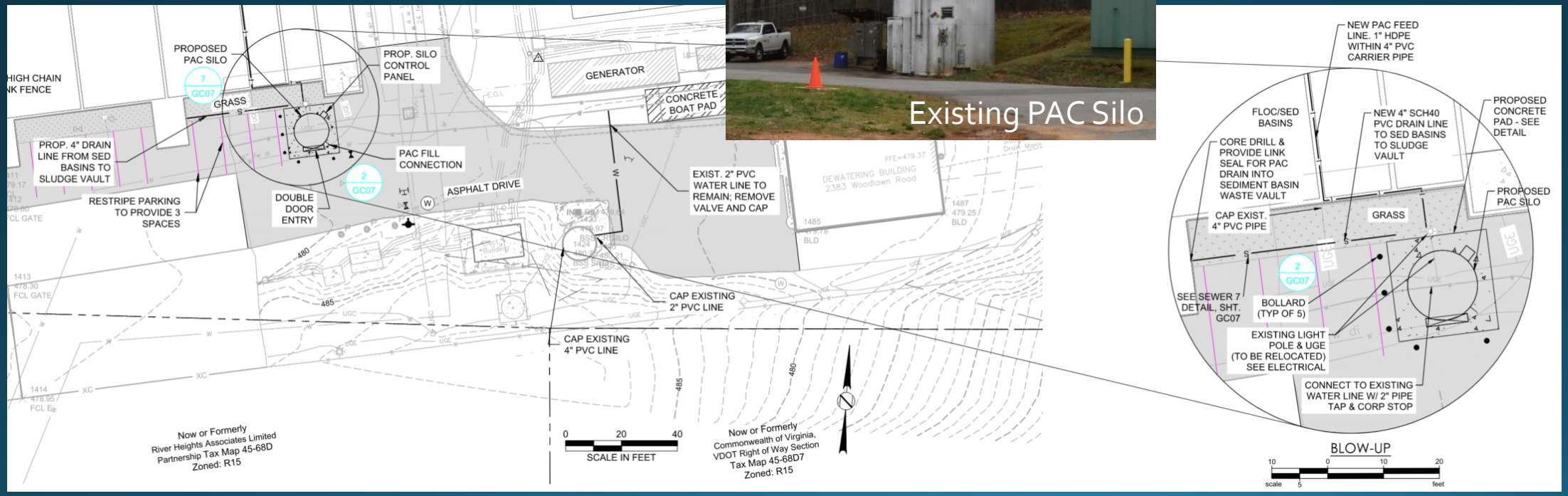


- Additional building and GAC system to increase treatment capacity from 1 to 2 MGD
- 60% design documents completed
- Construction: August 2025 – March 2027
- Received $6.24 M grant funds from VDH
- Budget $6.6 M

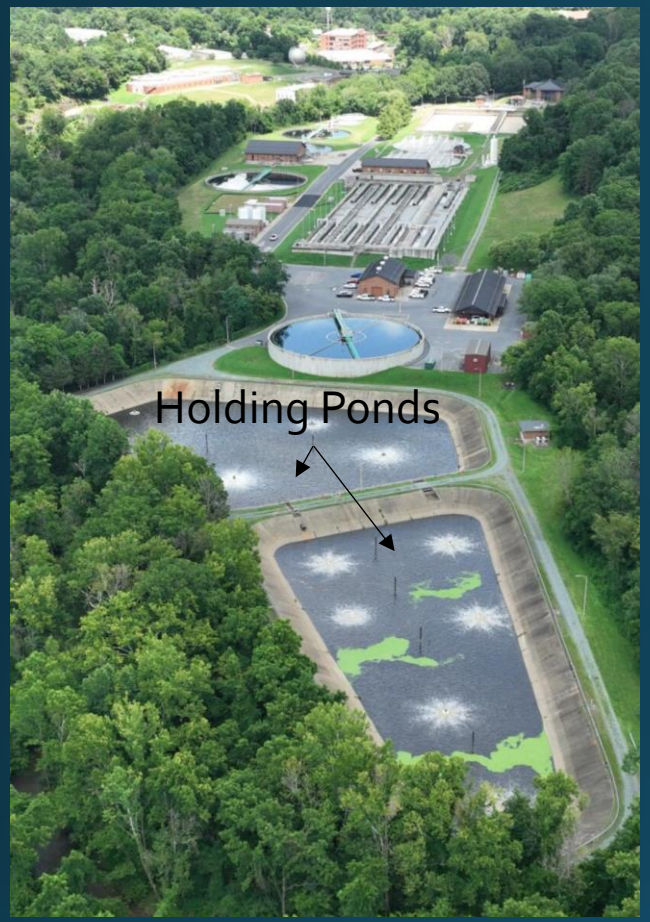
SRWTP – Powdered Activated Carbon Upgrades

- Includes new PAC silo and feed pumps to replace existing equipment
- Existing silo was a repurposed lime silo
- 100% design
- Construction: August 2025 – December 2026
- Project being considered for Congressionally Directed Spending Grant of $880k
- Budget $1.1 M

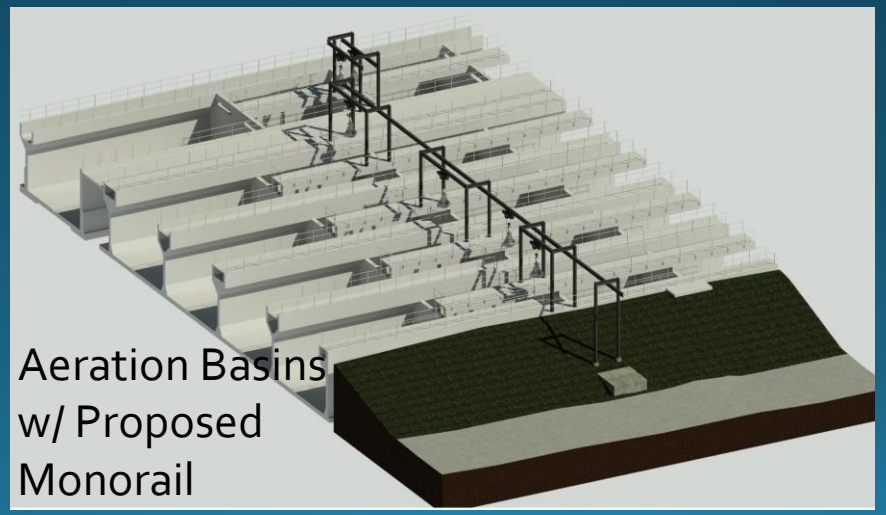




MC Structural and Concrete Rehabilitation

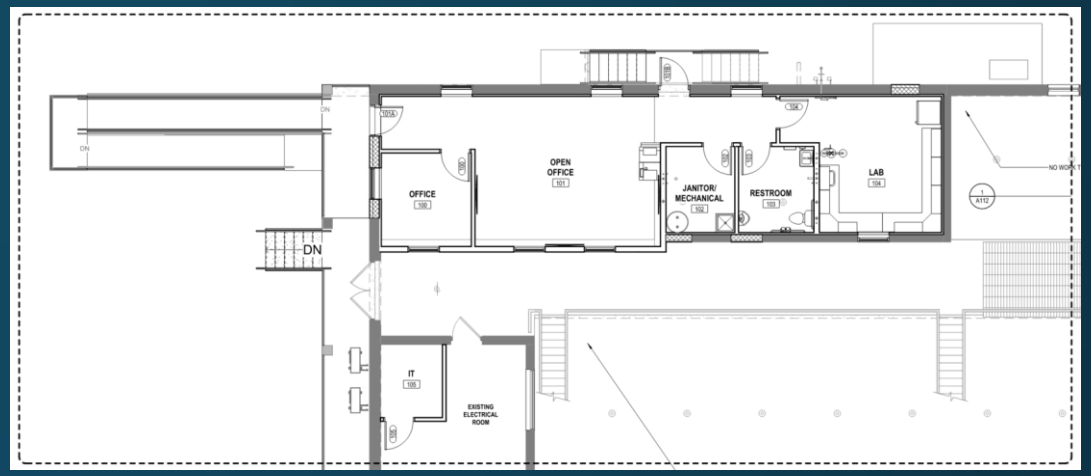


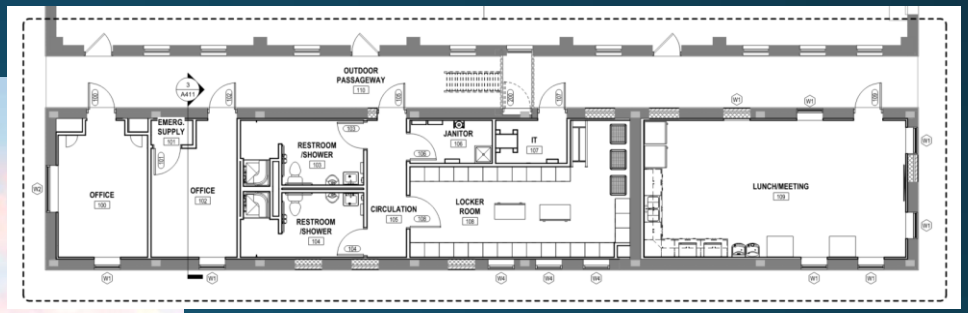
- Repairs throughout plant including holding ponds, EQ basins, primary clarifiers, digesters, and equipment shed roof and drainage
- Improves pump removal from Aeration Basins
- 100% design documents completed
- Construction: February 2025 – May 2027
- Budget $11.3 M



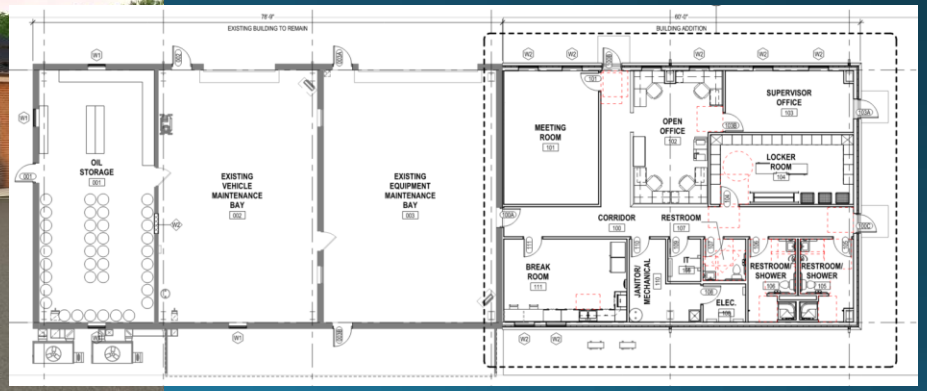
MC Building Upfits and Gravity Thickener Improvements

- Renovation of WW Operations and Maintenance buildings
- Original structures are 40 years old and no longer meet current staffing and operational needs
- Includes gravity thickener improvements – chemical feed and sludge line clean-outs
- 90% design documents completed
- Construction: February 2025 – December 2026
- Budget $7.5 M





Maintenance Building Rendering

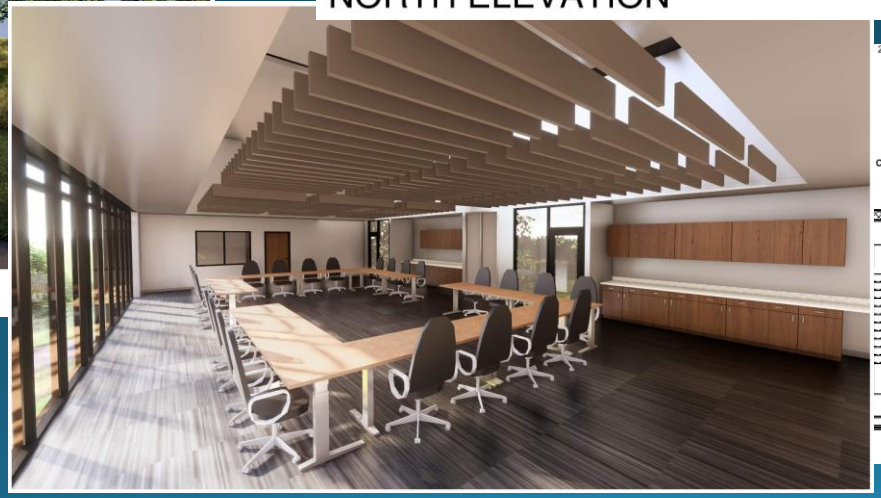


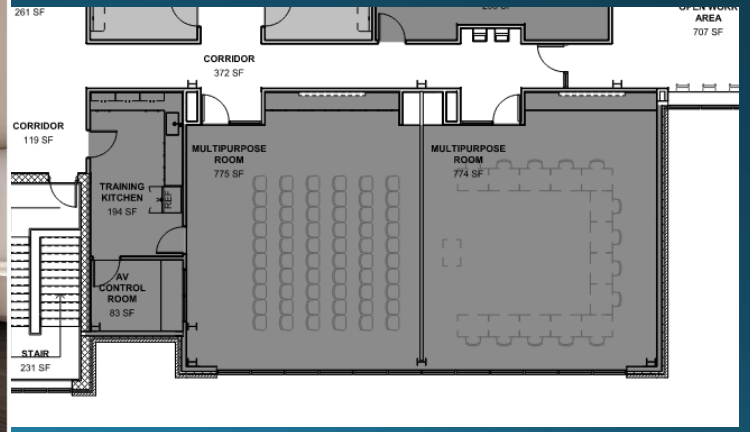
MC Administration Building Renovation and Addition

- Original building constructed in 1980's
- Renovate interior and expand
- Includes new board room, education center, and updated lab space
- Building footprint and interior layout revised to better incorporate exhibit space
- 75% design documents completed
- Construction: June 2025 - December 2027
- Budget $25 M

NORTH ELEVATION

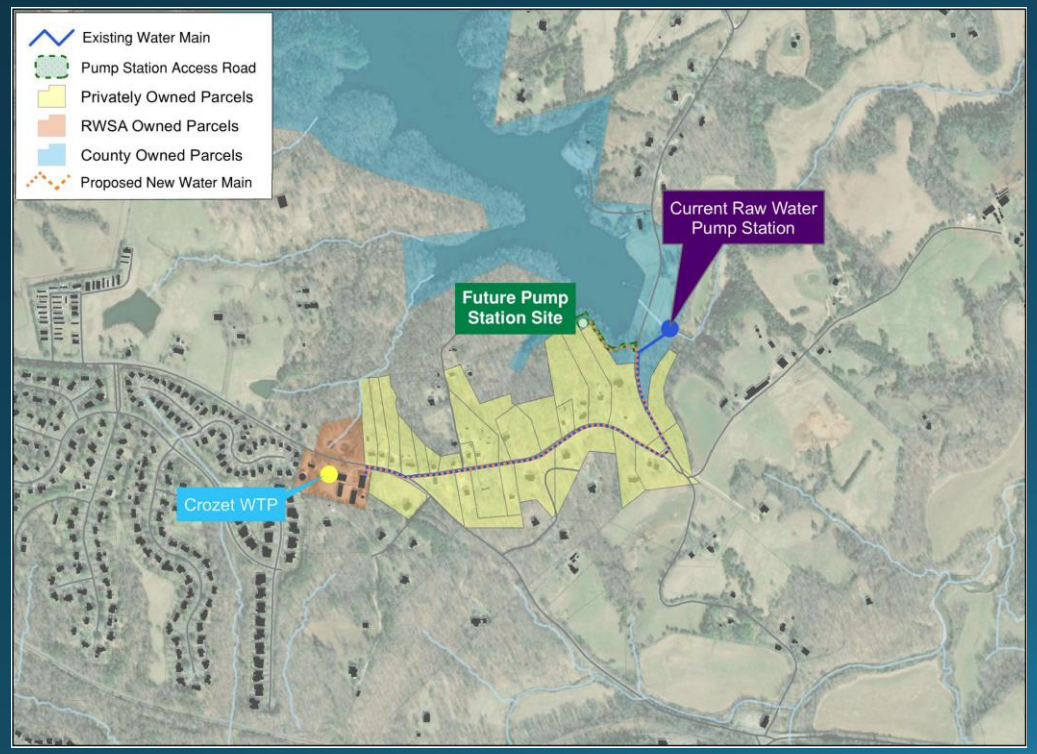
EAST ELEVATION - MAIN ENTRY





Beaver Creek Dam, Pump Station & Piping Modifications

- Upgrade the spillway to meet DCR dam safety standards
- Replace the raw water pump station, intake, and pipe to the Crozet WTP
- 50% design
- Construction: May 2026 – January 2030
- Anticipating federal NRCS grant
- Budget $47 M, anticipating $17 M grant from NRCS



Questions?