



**RWSA BOARD OF DIRECTORS
Minutes of Regular Meeting
October 22, 2024**

A regular meeting of the Rivanna Water and Sewer Authority (RWSA) Board of Directors was held on Tuesday, October 22, 2024 at 2:15 p.m. at Rivanna Administration Building, (2nd Floor Conference Room), 695 Moores Creek Lane, Charlottesville, VA 22902.

Board Members Present: Mike Gaffney, Jeff Richardson, Sam Sanders, Ann Mallek, Brian Pinkston, Quin Lunsford, Lauren Hildebrand

Board Members Absent: none

Rivanna Staff Present: Bill Mawyer, Lonnie Wood, David Tungate, Jennifer Whitaker, Betsy Nemeth, Scott Schiller, Austin Marrs, Victoria Fort, Stephanie Deal, Rob Haacke, Annie West, Tom Corrice, Deborah Anama, Jacob Woodson

Attorney(s) Present: Valerie Long

1. CALL TO ORDER

Mr. Gaffney convened the October 22, 2024, regular meeting of the Board of Directors of the Rivanna Water and Sewer Authority at 2:15 p.m.

2. AGENDA APPROVAL

There were no comments on or questions for the agenda.

Ms. Mallek moved that the Board approve the agenda. Mr. Sanders seconded the motion, which carried unanimously (7-0).

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

There were no comments on or questions regarding the minutes for the meeting held on September 24, 2024.

Mr. Pinkston moved that the Board to approve the minutes from the meeting held on September 24, 2024. Ms. Hildebrand seconded the motion, which carried unanimously (7-0).

4. RECOGNITION

Resolution of Appreciation for Robert Haacke, Wastewater Department Manager

Mr. Gaffney presented and read:

47
48 **Resolution of Appreciation for Robert Haacke**
49

50 **WHEREAS**, Mr. Haacke has served in the Wastewater Department in various positions
51 including Wastewater Operator, Assistant Wastewater Manager, and Wastewater Manager, for
52 the Rivanna Water and Sewer Authority for 35 years; and
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54 **WHEREAS**, over the same period of 35 years, Mr. Haacke has demonstrated leadership in
55 his field and has been a valuable resource to the Authority and its employees; and
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57 **WHEREAS**, Mr. Haacke's understanding of the Authority's operation and dedication and
58 loyalty to the Authority has positively impacted the Authority, its customers, and its employees;
59 and
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61 **WHEREAS**, Mr. Haacke's understanding of the wastewater operations of the Water &
62 Sewer Authority has supported a strategic decision-making process that provided benefits to the
63 customers served by the City of Charlottesville and the Albemarle County Service Authority as
64 well as the community as a whole. Through the leadership and skillful support of Mr. Haacke,
65 major treatment process improvements were implemented during his tenure including:
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- 67
- 68 ○ A high strength waste sampling program to protect the treatment stream
 - 69 ○ Aeration basin ammonia control to optimize the air blowers creating an estimated
70 savings of more than 15% on air blower electric expense
 - 71 ○ Optimization of the sodium hydroxide feed program for long-term savings

72 **NOW, THEREFORE, BE IT RESOLVED** that the Rivanna Water and Sewer Authority
73 Board of Directors recognizes, thanks, and commends Mr. Haacke for his distinguished service,
74 efforts, and achievements as a member of the Rivanna Water and Sewer Authority, and presents
75 this Resolution as a token of esteem, with its best wishes in his retirement.
76

77 **BE IT FURTHER RESOLVED** that this Resolution be entered upon the permanent
78 Minutes of the Rivanna Water and Sewer Authority.
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80 **Ms. Mallek moved that the Board to approve the Resolution of Appreciation for Robert**
81 **Haacke, Wastewater Department Manager. Mr. Sanders seconded the motion, which**
82 **carried unanimously (7-0).**
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84 Mr. Haacke thanked Rivanna for all the good years, during which he raised his two healthy,
85 successful daughters.
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87 Mr. Mawyer stated that no matter what time they got here in the morning, Mr. Haacke was here
88 with his coffee cup. He stated that allegedly, he got here around 4:30 a.m., so it would be a new
89 phenomenon to not have Mr. Haacke at the plant. He asked Mr. Haacke what he would be doing
90 at 4:30 a.m. in the future.
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92 Mr. Haacke stated that he would still be sleeping.

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Mr. Mawyer thanked Mr. Haacke and his wife and daughter for attending as well.

5. EXECUTIVE DIRECTOR'S REPORT

Bill Mawyer, Executive Director, stated that as one career ends, another continues. He stated that Mr. Haacke was their Wastewater Manager, and Brian Haney had been promoted to take Mr. Haacke's place, which left the opening of Assistant Wastewater Manager. He stated that Mr. Tom Corrice had been promoted to Assistant Wastewater Manager. He stated that Mr. Corrice had been with their organization for over seven years, working his way up through the system, and held both a bachelor's degree and a master's degree in education. He stated that they were pleased to see Mr. Corrice's career advancement to Assistant Wastewater Manager.

Mr. Corrice stated that he was honored and excited to start in his new position.

Mr. Mawyer stated that he would like to introduce a new team member, Annie West. He stated that Ms. West was the new Sustainability and Grants Coordinator. He stated that they had hired her directly from college. Ms. West stated that she graduated in May from the University of the South at Sewanee and majored in Environmental Humanities and Anthropology. He stated that she was from Norfolk, Virginia. She stated that she had lived in Crozet for three years during middle school.

Mr. Mawyer stated that he had to look up what anthropology was and was impressed to learn that anthropology majors develop expertise in historical and contemporary cultural and linguistic diversity, as well as skills in reading, research, and writing that prepare them for many professional careers. He stated that he appreciated the skills and expertise that Ms. West would bring to her position as Sustainability and Grants Coordinator, particularly in finding funding to support our projects. He stated that he was grateful to have Ms. West on board and welcomed her to their team.

Mr. Mawyer stated that they took pride in growing their own water and wastewater operators, and he had heard colleagues express difficulties in hiring qualified individuals. He stated that their philosophy was to hire engaged people and train them so they could get their licenses. He stated that they had three individuals who had recently obtained their licenses.

Mr. Mawyer stated that Dennis Barbieri recently passed his Class 1 Wastewater Operator license after four years with their organization. He stated that Dylan Schweickert passed his Water Operator Class 2 license after one year. He stated that Johanna Vaughn also passed her Water Operator Class 2 after one year. He stated that all three individuals had college degrees, which had expedited their licensing process and added valuable skills to their repertoire. He stated that they were thrilled to increase the credentials of their staff.

Mr. Mawyer stated that as part of their strategic plan priority of Communication and Collaboration, they typically invited elected officials to visit during Congress's summer recess. He stated that last year, Senator Deeds and Delegate Amy Laufer visited, and this year, Delegate Katrina Callsen took them up on the offer. He stated that they provided her with a windshield

139 tour and a virtual presentation about their organization. He stated that Mr. Gaffney also joined
140 the group to meet with Ms. Callsen. He stated that as they applied for grants, she encouraged
141 them to let her know if she could help. He stated that it was good networking opportunity.
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143 Mr. Mawyer stated that at the national level, there was a House Bill H.B. 7944 Water Systems
144 Per- and Polyfluoroalkyl Substances (PFAS) Liability Protection Act. He stated that they had
145 sent a letter to House Speaker Johnson and Congressman Good requesting their support for this
146 bill. He stated that the situation was that Congress had declared PFAS a hazardous substance
147 under the CERCLA federal laws, which prohibited the discharge of hazardous substances on
148 land or water. He stated that unfortunately, they had PFAS in their wastewater they were not
149 removing. He stated that this law would shield utilities like RWSA from litigation for
150 discharging hazardous materials, so they were hopeful the legislation would move forward.
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152 Mr. Mawyer stated that he had previously discussed an amendment to the local and regional
153 water supply planning regulations with the Board last month. He stated that they received
154 comments from Mr. Lunsford and Ms. Hildebrand about that amendment, which they forwarded
155 to DEQ. He stated that DEQ acknowledged the comments, but they had not heard further
156 updates. He stated that the next step was to coordinate with all the members of the planning
157 group and designate representatives for the regional planning area, including the County, ACSA,
158 City, RWSA, and presumably Scottsville.
159

160 Mr. Mawyer stated that DEQ would invite them to the first regional planning meeting to be held
161 before April. He stated that this process was moving forward, with the goal of strategically
162 planning regional and local water supply and how they could work together to achieve those
163 goals. He stated that one of their comments was that they were glad to help their neighbors, but
164 they hoped that the DEQ did not make the projects mandatory or require cross-jurisdictional
165 projects. He stated that this was included in the comments.
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167 Mr. Pinkston asked if that comment was formally stated to DEQ.
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169 Mr. Mawyer confirmed that it was included in the comments. He stated that they hoped the
170 concepts would not be made mandatory by DEQ.
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172 Ms. Mallek stated that it was distressing to read in the town hall literature that their analysis was
173 that there would be no impact on local governments or regional authorities, such as this one, and
174 they were giving them \$20,000 to conduct this regional planning.
175

176 Mr. Mawyer stated that there was still significant coordination required in this process, and the
177 ultimate plan over the next five years aimed to develop a regional plan ensuring clean drinking
178 water for citizens in Albemarle, Greene, Louisa, Buckingham, and Fluvanna Counties, along
179 with the City of Charlottesville.
180

181 He stated that on another note, they had conducted a regional dam safety tabletop exercise,
182 which was led by Senior Engineer, Victoria Fort. Ms. Fort effectively brought together
183 representatives from their region, including state police, VDOT, the National Weather Service,
184 and local government agencies. Mr. Mawyer stated that she conducted exercises on potential

185 scenarios, such as issues with the Beaver Creek Dam or Sugar Hollow Dam, and how they would
186 communicate and prepare for emergencies. He stated that Rivanna has Emergency Action Plans
187 for every dam, which include procedures and processes that should be followed in case of an
188 emergency, with the worst-case requiring evacuation of people from the danger zones.

189
190 Mr. Mawyer stated that RWSA co-sponsored the Imagine a Day Without Water program with
191 the City of Charlottesville and Albemarle County Service Authority, a youth art contest with
192 applications due by October 28, featuring the theme "What's Your Drop in the Bucket?" He
193 stated that they were also supporting Breast Cancer Awareness Month, and their team wore pink
194 t-shirts and took a photo outside to express their support for fellow team members and the
195 community.

196
197 Mr. Mawyer stated that the recent storm Helene had impacted the pipeline transferring water to
198 Ragged Mountain from Sugar Hollow, and they were currently restoring the 100-year-old pipe.
199 He stated that fortunately, they did not require water at Ragged Mountain at present, and they
200 expected to have the pipe restored in a month or two, allowing them to resume transfers if
201 needed.

202
203 Mr. Mawyer stated that thankfully, drought appeared to be behind them, and they had lifted the
204 Drought Watch on October 2 after consulting with the Regional Drought Committee and
205 Chairman Gaffney. He stated that they had notified the City and County of their decision to lift
206 the Drought Watch, and their area had received 9 inches of rainfall in September, which had
207 alleviated dry conditions. He stated that however, some concern remained in the state drought
208 map, primarily due to reservoir levels, which was not a concern for Rivanna.

209
210 Mr. Mawyer stated that their daily reports showed Ragged Mountain's water level was slightly
211 lower than usual, but this was intentional as their team had conducted an inspection of the pipe
212 used to release water from the reservoir. He stated that Ms. Fort and their engineers had
213 inspected the pipe, so they had deliberately lowered the reservoir level to prevent water from
214 entering the tunnel during the inspection. He stated that once the pipe was restored, they would
215 replenish the reservoir and reach 100% capacity.

216
217 Mr. Mawyer stated that in November 2023, he had reported to the Board that there was a
218 chemical release at the South Rivanna Water Treatment Plant, where liquid lime was
219 inadvertently released from the lime storage building into the storm pipe and entered the South
220 Rivanna River. He stated that they reported this incident to DEQ, who had investigated and
221 issued a civil charge, a fish investigation fee, and a fish replacement fee totaling approximately
222 \$16,000. He stated that they had accepted the Consent Order and paid the fees.

223
224 Mr. Mawyer stated that in a similar incident, but with a different outcome, they had also reported
225 a submergence of the Rivanna Pump Station in January to DEQ. He stated that to dewater the
226 facility, they had had to pump wastewater into Moores Creek, and they had notified DEQ of this
227 action. He stated that David Tungate, Director of Operations and his staff had effectively
228 communicated with DEQ throughout the pumping process, both before and after, and had
229 conducted a visual inspection of Moores Creek, making multiple reports to DEQ. He stated that
230 additionally, their attorney from Williams Mullen, "Speaker" Pollard, had reviewed their permit

231 and coordinated with DEQ. He stated that on October 10, DEQ notified them that there was no
232 violation of their permit, resulting in no fine. He stated that this was welcome news.

233
234 Mr. Mawyer stated that it had been reported in the news that a court in California had ordered the
235 EPA to reevaluate the risk of adding fluoride to drinking water, citing concerns about its impact
236 on unborn children and children's IQ. He stated that they followed the recommendations of the
237 EPA and the Virginia Department of Health. He stated that they had previously lowered their
238 fluoride level from 1.2 milligrams per liter to 0.7 milligrams per liter, which they currently
239 complied with in our treatment process.

240
241 Mr. Mawyer stated that they were waiting for any guidance from the EPA and VDH before
242 making any adjustments to their fluoride level. He stated that fluoride helped prevent tooth
243 decay. He stated that it was noted in his report that the American Dental Association 2018
244 webpage stated that fluoride was one of the most effective public health measures to prevent
245 tooth decay and was one of the 10 great public health achievements of the 20th century. He
246 stated that they were waiting for guidance from their regulators before making any adjustments
247 to fluoride. Mr. Mawyer stated that he understood Mr. Lunsford had received an inquiry from a
248 resident about whether their community was considering changing the fluoride application. He
249 stated that at this time, they remained at 0.7 milligrams per liter and were waiting for further
250 guidance from VDH.

251
252 He stated that this concluded his report. He stated that on a sad note, Fred Landis, the former
253 attorney for both authorities, had passed away the previous month. He stated that they were sorry
254 to hear about his passing.

255
256 Mr. Lunsford asked if Mr. Mawyer could provide the letter they sent regarding House Bill 7944.

257
258 Mr. Mawyer stated yes, he would send that to the Board members.

259
260 Mr. Richardson stated that Ms. Mallek, in her role on the Board of Supervisors, had heard this
261 report several weeks ago, but their Emergency Management team formally presented a report to
262 the Supervisors on the activities in the County during Hurricane Helene. He stated that those
263 staff specifically mentioned and commended Mr. Mawyer and his team for the outstanding work
264 and coordination they provided during the storm event.

265
266 Mr. Richardson stated that they shared significant stream and water level data with the EMS
267 teams in real-time, which greatly informed their response efforts. He stated that they were able to
268 deploy swift water rescue teams across the County, with three successful rescues and no
269 fatalities. He stated that Mr. Mawyer and his team played a crucial part in this success. He stated
270 that he would like to extend his gratitude to them, as requested by the team, and express their
271 appreciation for the coordination.

272
273 Mr. Mawyer thanked Mr. Richardson. He stated that Ms. Whitaker, Ms. Fort, and Mr. Tungate
274 were integral in those operations.

275
276 Ms. Mallek stated that she would like to add that there was discussion at the Board of

277 Supervisors level and with senior staff regarding the benefits of having more distributed
278 measuring in place. She stated that given the significant topographical differences, it was
279 challenging to accurately predict where high water would be located. She stated that this was an
280 issue that they should all consider as they moved forward to better plan for future storm events.

281
282 She stated that she would like to pose a question that she would leave open for now, if necessary,
283 for a future discussion. She asked if the Sugar Hollow Pipeline had been inspected recently, as
284 she had not received any updates since 2008, and there was a lot of wet terrain in pastures in
285 White Hall, which had become more prevalent in recent years.

286
287 Ms. Whitaker stated that she could not provide the exact date, but she would locate it and send it.
288 She stated that typically, they tried to walk the entire alignment at least once a year to inspect for
289 broken equipment, as some were located in farm fields where tractors may occasionally hit
290 various objects.

291
292 Ms. Mallek stated that subsidence had been a common issue in her fields, which was unrelated to
293 pipeline problems. She stated that the situation was that a pipe that was originally four feet below
294 ground level may now be six inches below due to the surrounding area sinking. She stated that
295 she believed that changes were occurring at a more dramatic pace than they used to be.

296
297 Mr. Mawyer stated that this emphasized that the new pipe to be constructed from Rivanna to
298 Ragged reservoirs would replace the pipe that was 100 years old. He stated that this was part of
299 the water supply strategy envisioned, and he was pleased that they would be able to implement
300 the plan.

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302 **6. ITEMS FROM THE PUBLIC**

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304 There were none.

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306 **7. RESPONSES TO PUBLIC COMMENTS**

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

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310 **8. CONSENT AGENDA**

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312 *a. Staff Report on Finance*
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314 *b. Staff Report on Operations*
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316 *c. Staff Report on CIP Projects*
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318 *d. Staff Report on Administration and Communications*
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320 *e. Staff Report on Wholesale metering*
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322 *f. Staff Report on Drought Monitoring*

323
324 Mr. Lunsford stated that he had a question regarding project 14 in the Capital Improvement Plan
325 project report. He asked if the water quality study report that was mentioned previously available
326 yet.

327
328 Mr. Mawyer stated that it was not yet available, but was expected by the end of October. He
329 stated that they would send it as soon as it was available.

330
331 **Ms. Mallek moved that the Board approve the Consent Agenda. Ms. Hildebrand seconded**
332 **the motion, which carried unanimously (7-0).**

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334 **9. OTHER BUSINESS**

335
336 *a. Presentation: Financial Update and Year-end Results*
337 *Lonnie Wood, Director of Finance and Information Technology*
338 *Stephanie Deal, Finance Manager*

339
340 Stephanie Deal, Finance Manager, stated that she and Mr. Wood were presenting a financial
341 update on fiscal year-end 2024 results for the year. She stated she would begin by reviewing the
342 overall presentation, which would include a brief refresher on their specific financial policies,
343 followed by a more in-depth discussion by Mr. Wood. She stated they would cover the policies
344 that applied today, and they would not be discussing all of the policies. She stated Mr. Wood
345 would review the year-end results, the operating working capital target, the disposition of rate
346 center results, and would make a request for Board action to approve the fund transfers.

347
348 Ms. Deal stated they would first see the Financial Policies Index, which outlined the components
349 that made up their policies. She stated these policies guided their decisions and prepared them for
350 long-term sustainability. She stated over time, these policies had originated from various sources,
351 including the original four-party agreement, cost allocations with Albemarle County Service
352 Authority and the City, and bond issue requirements, which were overseen by their bond
353 trustees.

354
355 Ms. Deal stated that today, she would touch briefly on the policy objectives and the reserve and
356 fund policies, specifically the operating portion of Tier 2 and the discretionary portion of Tier 3.
357 She stated the financial policy objectives were designed to prepare them for and insulate them
358 from fiscal crisis, enhance their financing opportunities by supporting the highest credit ratings
359 possible, promote long-term financial stability by focusing on the total financial picture of the
360 Authority, and link their long-term financial planning with day-to-day operations.

361
362 Ms. Deal stated the reserve and fund policies were made up of three tiers, defined mostly by
363 bond requirements or the purpose of use. She stated Tier 1 was a debt service reserve, strictly
364 reviewed, enforced, and held by the bond trustee. She explained that Rivanna made monthly
365 payments to the trustee for this fund, but they did not control the ins and outs after that point.

366
367 Ms. Deal stated the operating portion of Tier 2 was the Authority's operating fund, which served

368 as the daily cash account and was not accounted for by the rate center. She stated all cash
369 received and paid out by the Authority was processed through this account. She stated the
370 reserve balances by rate center were calculated manually following each fiscal year audit, which
371 they would be reviewing today.

372
373 Ms. Deal stated the operating account was recommended to have a minimum balance of 20% of
374 the annual budget by the bond indenture, but they were not required to maintain it at that level.
375 She stated that rather, the Authority had agreed to target the operating account to have 60 days'
376 worth of the total annual budget available for daily and monthly cash flow needs. She stated the
377 Tier 3 reserves were internally restricted at the Authority's discretion. She stated they were
378 focusing on the discretionary reserves. She stated the rate center separation was crucial for these
379 reserve accounts to avoid the combination of funds, ensuring true data by rate center.

380
381 Ms. Deal stated for the discretionary portion, they maintained a central depository for each rate
382 center to track inflows and outflows. She stated inflows included planned depreciation from
383 operating budgets, yearly surpluses, and planned excess rate revenues from the CIP growth rate.
384 She stated outflows were the yearly deficits being funded from these reserves to replenish the
385 operating account balance using the disposition of year-end results process. She stated the use of
386 these reserves required Board action and approval, which is what they would be asking for today.

387
388 Lonnie Wood, Director of Finance and Information Technology, stated that they have brought
389 this agenda item with the Board for the past 15 to 20 years. He stated that as Ms. Deal had
390 mentioned, it was part of their internally developed financial policies, which they had created
391 and adopted in 2011. He stated that this particular item focused on reviewing their operating cash
392 or working capital target amounts and how they related to their year-end results. He stated that
393 their year-end result was approximately \$700,000 in surplus, which was a significant
394 improvement over last year's fiscal 2023 year-end results, which showed a \$1.4 million deficit.

395
396 Mr. Wood stated that the key factor in achieving this improvement was the actual revenue
397 exceeding their budget estimates by \$1.1 million, which helped cover their expenses, which
398 came in about \$644,000 above their budget estimate. He stated that the two line items that
399 contributed to the deficit, utilities and chemicals, were the main culprits they had discussed in
400 their Fiscal Year 2025 budget work session. He stated that they believed that these issues would
401 be resolved in 2025. He stated that in 2024, the main reason for the budget exceeding their target
402 was these two line items were not keeping up with significant inflation the past several years. He
403 stated that all other line items came in under budget, which helped mitigate the issue.

404
405 Mr. Wood stated that after reviewing their year-end results, they examined their year-end target
406 cash balances and compared them to their year-end balance. He stated that in this case, they
407 ended the year with 7.89 in their operating account, which was slightly above their target of 7.84
408 for 2024. He stated that although it may seem like they should have achieved a \$700,000 surplus,
409 one factor to consider was that they had restricted cash reserves held by the trustee at the Bank of
410 New York, which is not included in the operating cash account.

411
412 Mr. Wood stated that the interest earnings from these reserves were reported on their income
413 statement, but the cash itself remained with the trustee and was not included in the operating

414 account. He stated that this was why there was a slight discrepancy. He stated that essentially,
415 they had effectively hit their target.

416
417 Mr. Wood stated that they then compared their 2024 target to their 2025 target, which was
418 calculated by dividing the total budget by 365 and then multiplying by 60 to get a 60-day target.
419 He stated that the target increase for the new fiscal year was \$1.2 million, which was the
420 difference between their 2025 target and where they had ended up in 2024. He stated that
421 therefore, they were confident that the funds needed to transfer from their discretionary reserve
422 to their operating account to make it whole again were a result of the new policy target for FY
423 2025

424
425 Mr. Wood stated that the transfer process was summarized in the report, based on the year-end
426 results. He stated that they calculated each rate center's share of the transfer amount and showed
427 it on the last slide. He stated that these were the year-end balances of the discretionary reserves,
428 adjusted to prepare for the new fiscal year.

429
430 Mr. Wood stated that one notable aspect was the large negative balance in the capital account,
431 which was for specific capital projects. He stated that this balance had been intentionally created
432 as part of a bond issue process. He stated that in June, they had been working on a bond issue,
433 and the Board had passed a resolution to approve it, including a reimbursement resolution. He
434 stated that this resolution allowed them to spend down their capital account, issue bonds, and
435 then replenish the capital account.

436
437 Mr. Wood stated that in August, they had closed on the bond and immediately pulled \$9 million
438 to \$10 million out, bringing the capital account back to a positive or break-even status. He stated
439 that they did this because of IRS regulations for bond issues, which required a two-year spend-
440 down period. He stated that within this two-year window, they had targets to meet, with the first
441 target being to draw 10% of the bond proceeds within six months.

442
443 Mr. Wood stated that they had already met this target. He stated that the purpose of building up a
444 healthy reimbursement was to get a head start on the spend-down requirement. He stated that in
445 essence, they followed this process every few years.

446
447 He stated that for the last couple of years, they had been tracking this as shown in the chart
448 included with the memo. He stated that some rate centers had a surplus, while others had a
449 deficit. Mr. Wood stated that their goal was to prevent co-mingling of funds between rate
450 centers, as four of these rate centers were fully funded solely by the Service Authority, and these
451 two were split between the Service Authority and City. He stated that they kept the rate centers
452 separate to avoid mixing all of those funds. He stated that they were now requesting the Board to
453 transfer funds from the discretionary reserves to the operating account in the amounts shown to
454 bring their operating account up to their target balance.

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456 Mr. Richardson asked to see the slide referring to the 20% for best practices and the 60-day on-
457 hand requirement. He asked if he understood correctly that they currently had 60 days on hand.

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459 Mr. Wood stated that was right.

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Mr. Richardson asked if it was recommended they be at 20% but not mandatory.

Mr. Wood stated that it was in the bond trustee documents; the difference was 13 days. He stated that it was 73 days versus 60 days. He stated that 60 days seemed like a good cutoff point. He stated that they had two customers that paid their bills on time (City and ACSA), so they did not have a problem with delinquent accounts. He stated that in July, they billed their two customers by August 5. He stated that by the end of the month, they were paid by their two customers, so they had to float those 60 days. He stated that they had two debt service payments in July and August, four or five payrolls, and uses that working capital to float these payments that until the first bill was paid in the fiscal year.

Mr. Richardson asked if Mr. Wood had ever felt uncomfortable or if things had thinned too much to where he would have preferred to have 20%.

Mr. Wood stated that historically, yes, but not currently.

Mr. Mawyer asked if they had to get a loan at one time.

Mr. Wood stated that they had to get a loan from the Solid Waste Authority to cover payroll expenses many years ago.

Mr. Mawyer stated that it was the Board's support for building the rates that allowed them to establish those cash balances.

Mr. Gaffney stated that yes, the significant difference was that the Board had changed the policy regarding Rivanna's need for money to build these reserves.

Mr. Wood stated that they continued to gather information and build upon suggested policies until the Board was comfortable adopting some of these policies in 2011. He stated that they had to address the drought, which necessitated a significant mid-year rate increase. He stated that this was particularly challenging, as a rate increase was not ideal when advising people to reduce their water consumption.

Mr. Gaffney stated that one of the Board members made a notable suggestion in the spring after the drought, stating that since they were no longer in a drought, they should reconsider lowering the water rates. He stated that the Board ultimately decided against lowering the rates, citing the need for the Authority to fund its operations, and therefore did not make any changes to the rates.

Mr. Wood stated that this led to the development of the reserve policies and explained why they were necessary, as well as how they would be beneficial during emergencies.

Mr. Richardson moved that the Board transfer the funds as recommended by staff. Mr. Sanders seconded the motion, which carried unanimously (7-0).

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

508
509 Jennifer Whitaker, Director of Engineering & Maintenance, stated that she was here today to
510 present information on the Ragged Mountain Reservoir to Observatory Water Transmission
511 Pipeline and Pump Station Project. She stated that she would like to start by acknowledging the
512 significance of this critical project, which had been in the works for approximately 20 years. She
513 stated that it was first included in their Capital Improvement Plan in 2006, making it a vital
514 project for their Authority. She stated that to provide some background, she would like to briefly
515 review the history of this project.

516
517 Ms. Whitaker stated that the Observatory Water Treatment Plant was currently served by two
518 water mains: the Ragged Mountain Water Line, a pipe that from Ragged Mountain Dam to the
519 east, across Rt. 29 passing through Fontaine Research Park, along the railroad, and then on to the
520 Stadium Road Pump Station. She stated that this pipe was built in the 1940s as part of a
521 substantial infrastructure upgrade at the University and within the City. She stated that the
522 second pipe, the Lower Sugar Hollow Water Line, was constructed in the 1920s and originally
523 extended from Sugar Hollow Reservoir.

524
525 Ms. Whitaker stated that when they upgraded the Ragged Mountain Dam, they split the pipe into
526 two segments, resulting in an upper and lower Sugar Hollow pipeline. She stated that this pipe
527 followed parallel to Reservoir Road, crossed Route 29, goes uphill to the Royal Pump Station, up
528 Hereford Drive to the back of the Observatory water treatment plant. She stated that both of the
529 mains were 18-inch pipes. She stated that this project aimed to replace both pipes and pump
530 stations with a single, modern main and pump station. She stated that the proposed design
531 featured a 4-mile stretch of 36-inch pipe, with a new pump station located at Foxhaven Farm.

532
533 Ms. Whitaker stated that this project would ultimately enable RWSA to transfer 10 million
534 gallons of water per day from Ragged Mountain to the Observatory Treatment Plant, allowing
535 them to utilize the full capacity of the plant, that had recently been constructed. She stated that in
536 the future, they would also be able to pump 16 million gallons per day simultaneously back to
537 South Rivanna WTP, which she would discuss in more detail later. She stated that eventually, the
538 pump station would have a total capacity of 26 million gallons per day. She stated that they
539 anticipated beginning construction in January, and she would elaborate on the budget in a
540 minute.

541
542 Ms. Whitaker stated that this project, the Ragged Mountain to Observatory project, is a key
543 component of the greater Community Water Supply Plan. She stated that following the 2002
544 drought, RWSA developed this concept and began working on it from a planning, design, and
545 legal standpoint. She stated that between 2012 and 2014, they rebuilt Ragged Mountain Dam and
546 Reservoir, increasing its capacity. She stated that they were now planning to raise the pool within
547 an additional 12-feet, as well as construct the pipeline from Ragged Mountain to Observatory,
548 and the small connector piece that heads north.

549

550 Ms. Whitaker stated that the pump station at Foxhaven Farm would be a critical component of
551 this project. She stated that in the near future, they expect to begin bidding the remaining portion
552 of the Community Water Supply project, which includes the pipe from South Fork Reservoir, as
553 well as an intake and a pump station. She stated that the provided schematic of the Ragged
554 Mountain Raw Water Pump Station site showed that it was about 1.5 acres located off Reservoir
555 Road.

556
557 Ms. Whitaker stated that it was purchased from the University of Virginia Foundation at
558 Foxhaven Farm. She stated that the proposed building depicted on the right of the slide would be
559 about 4800 square feet, climate-controlled and brick-veneered. She stated that there was a small
560 retaining structure around the outside, and it would have solar panels on the roof.

561
562 Ms. Whitaker stated that they believed there was some value in being able to run this facility
563 with solar power for a portion of the time. She stated that the facility features seven interior
564 pumps, eight valve vaults in the yard, and a network of pipes that will allow them to interconnect
565 each reservoir and treatment plant. She stated that they will also have a generator and sump
566 system to ensure continuous operation and prevent water submergence. She stated that during
567 construction, they will need to relocate the existing 18-inch water line through the site.

568
569 Ms. Whitaker stated that to provide a clearer schematic, she had included a brief overview of the
570 Reservoir Road facility. She stated that on the right side, there will be a driveway entrance with
571 architectural-grade fencing surrounding the facility. She stated that extensive landscaping is
572 planned, although it is not visible in this image. She stated that their agreement with the UVA
573 Foundation includes both architectural and landscaping design control, which had been reviewed
574 extensively by the Foundation and Albemarle County.

575
576 Ms. Whitaker stated that the provided mock-up of the facility's interior featured two rooms,
577 including an electrical room on the back side beyond a wall. She stated that the configuration of
578 the seven interior pumps was also shown. She stated that the design included a roll-up door,
579 simple door, and LED lighting with a drop ceiling to minimize the conditioned envelope. She
580 stated that solar panels would be installed on the roof to reduce electrical consumption. She
581 stated that the intent was to minimize electrical consumption while meeting their objectives. She
582 stated that the facility also featured a roll-up door and bridge crane to allow them to move pieces
583 in and out of the facility.

584
585 Ms. Whitaker stated that the piping contract had been divided into three segments, with 21,000
586 linear feet of 36-inch pipe to be installed. She stated that the segments are designated as Line A,
587 Line B, and Line C, with Line A covering the far western portion, Line B connecting to the
588 University, and Line C connecting to the golf course. She stated that the main in the golf course
589 had previously been completed, and they aimed to make this connection while having a
590 contractor on site.

591
592 She stated that they had issued an invitation for bids in late August and opened them on October
593 1.

594
595 Ms. Whitaker stated that they received two bids. She stated that the bids were close to each other.

596 She stated that one was from Thalle Construction for \$56.5 million, and they were based in
597 North Carolina, having previously constructed the Ragged Mountain Dam, which meant they
598 were familiar with the area. She stated that English Construction submitted a bid for just over
599 \$59 million. She stated that their engineer's estimate on the day of bidding was slightly under
600 \$49 million.

601
602 Ms. Whitaker stated that piping prices had been extremely volatile over the past couple of years.
603 She stated that the engineer's estimate, six months, three months, nine months, and 12 months
604 prior to this, were lower. She stated that they had been receiving bid tabulations from other
605 municipalities to better understand the construction market. She stated that RWSA staff had also
606 been researching pipe prices and attempting to create their own estimate. She stated that given
607 that the cost estimates came in significantly over budget, staff spent time negotiating with Thalle
608 Construction to see how much they could bring the price down.

609
610 Ms. Whitaker stated that they were able to identify approximately \$2.6 million worth of cost
611 savings in the project. She stated that as a result, they were able to bring the price down to just
612 shy of \$54 million, covering the pipe and pump station. She stated that the per square foot cost
613 for building construction, particularly for this type of building, was still very high. She noted that
614 there was also concern from contractors about rock removal along this alignment. She stated that
615 the difficulty in finding workers and contractors for the building trades was driving up pricing.

616
617 Ms. Whitaker stated that in the CIP, the pipeline project had \$33.5 million allocated, and the
618 pump station had \$12.35 million allocated, leaving them with a total of approximately \$46
619 million. She stated that to move forward with this project, they needed a \$61.5 million Capital
620 Improvement Program budget, which represented an increase of \$15.6 million, a 34% increase in
621 capital budget.

622
623 Mr. Pinkston asked if the difference between \$61 and \$54 M were the soft costs.

624
625 Mr. Mawyer stated yes, the consultant fees, easement fees, permits, and contingency for
626 construction were all costs included in the total project budget of \$61.5 M.

627
628 Mr. Pinkston asked if any of those costs went up, or if it was just construction.

629
630 Ms. Whitaker stated that the increase was primarily for construction. Engineering costs did not
631 increase because those were fixed early in the design.

632
633 Mr. Pinkston asked what kinds of reductions they had to take.

634
635 Ms. Whitaker stated that the biggest reduction they included was a change in pipe wall thickness.
636 She stated that historically, pipe manufacturers had a thickness class, which was an American
637 National Standards Institute (ANSI)-specified standard. She stated that this was a standard that
638 had been used for a very long time. She stated that the industry and many utilities have been
639 migrating to a pressure class standard. She stated that they chose to accept the pressure class pipe
640 rather than the wall thickness-based classification. She stated that it was a relatively small
641 difference in wall thickness, but it was about \$1.5 million in differential cost for the 4 miles of

642 pipe.

643

644 Mr. Gaffney asked if there was any difference in warranty, guarantee, or lifespan of the pipe.

645

646 Ms. Whitaker stated no.

647

648 Mr. Lunsford asked if they had completed a geotechnical survey or consider classifying some of
649 the type of rock in the original bid.

650

651 Ms. Whitaker stated that it was all classified.

652

653 Mr. Pinkston asked what classified meant.

654

655 Ms. Whitaker stated that they had estimated the quantity of rock within the contract and asked
656 the contractor to provide a unit price based on that removal of that quantity. She stated that this
657 method helped to transfer some of the risk from the contractor and reduce costs. She stated that
658 historically, many utilities would bid unclassified rock, meaning that contractors took all of the
659 responsibility for determining the quantity of rock and removing it from the ground. She stated
660 that however, in the past, they had instances where the contractor was not prepared for the actual
661 quantity of rock, such as during the Schenks Branch Interceptor work. She stated that in that
662 case, they had only a few borings, and they had listed the area as unclassified, only to find that it
663 was solid granite. She stated that the contractor was not well-prepared for this situation, and it
664 was a challenge.

665

666 Mr. Mawyer stated that the unit price for removal of rock and the estimated rock quantity were
667 included in the total base bid, making it a competitive price. He stated that the utility took on the
668 risk of the actual quantity of rock required, as it could vary. He stated that they had specified
669 11,000 cubic yards of rock, and the contractor would be paid their unit bid price for that amount
670 if required to be removed. He stated that if the actual quantity removed exceeded 11,000 cubic
671 yards, they had to make an adjustment and pay additionally; if the actual quantity fell below that
672 amount, they received a credit, thereby sharing the risk.

673

674 Ms. Mallek stated that otherwise, the contractor would raise the contingency, in which case they
675 would pay for it anyway.

676

677 Ms. Whitaker stated that this classification method involved more accounting in the field, but it
678 generally helped keep everyone on the same page regarding the current quantity and cost of rock.

679

680 Mr. Pinkston stated that he would like more information on the difference between the original
681 estimate and the actual bids for the pump station.

682

683 Ms. Whitaker stated that their original CIP allocation, which was not the engineer's estimate, was
684 approximately \$12 million for construction costs. She stated that in the actual bid, it was over
685 \$18 million.

686

687 Mr. Pinkston asked if this was mostly due to the cost of equipment now.

688

689 Ms. Whitaker stated that it did not appear to be the issue. She stated that when they spoke with
690 the contractor, Thalle stated that they had limited feedback from potential building envelop
691 constructors and were unable to find anyone willing to construct the shell. The cost in the bid
692 reflects their uncertainty.

693

694 Mr. Mawyer stated that Thalle's price for constructing the pump station was very similar to
695 English's price.

696

697 Ms. Whitaker stated that one of the key takeaways from their conversations with the contractors
698 was that they were all extremely busy. She stated that as a result, the competition for projects
699 within this time window was not as high as one might expect, particularly in terms of location
700 and economic profile. She stated that North Carolina was currently experiencing a high demand
701 for heavy equipment and contractors, which was further reducing the competitiveness of this
702 market.

703

704 Mr. Mawyer stated that the University also recently reported they had over \$1 billion in projects
705 under construction right now.

706

707 Mr. Pinkston stated that he assumed that delaying the project was not a good idea for a variety of
708 reasons. He stated that if they came back in six months, the prices would likely not be better.

709

710 Ms. Whitaker stated that they had discussed internally various ways to try to reduce this price.
711 She stated that one option was to go back and rebid, or another was to break this apart into two
712 contracts and rebid. She stated that she believed the risks of not accepting the market as it is, and
713 the risk of not having these two projects coordinated by a single contractor, were relatively high.
714 She stated that therefore, she was not sure they would achieve the desired result by pursuing that
715 route.

716

717 Ms. Whitaker stated that they were able to pull approximately \$2.6 million out of the costs of the
718 projects. She stated that they were still discussing cost reduction options, particularly for the
719 building. She stated that there was still a possibility of reducing the price via negotiated field
720 orders. She stated that however, they would not be able to make up the \$15.6 million difference.

721

722 Ms. Mallek stated that having a smaller pipeline would provide a benefit, serving as a form of
723 practice to gain experience. She stated that this experience could then be applied when moving to
724 the larger pipeline, potentially allowing for smoother mobilization and continued progress.

725

726 Ms. Whitaker stated that she attended a dam safety conference in September, and Thalle was a
727 sponsor of that conference. She stated that they were interested in the Beaver Creek Dam
728 Spillway project, and the rest of the pipeline work. She stated that this may just be their initial
729 foray into some of the RWSA work.

730

731 Ms. Mallek stated that it would give us a chance to try them out too, so they could potentially
732 work with them on bigger projects. She stated that she was not an engineer, but she would guess
733 that there was 20 years of work being scheduled for contractors working in North Carolina, so

734 they could not wait that long for the market to settle down. She stated that it would take forever
735 to rebuild there.

736
737 Ms. Hildebrand stated that Ms. Whitaker mentioned that the cost of the change in piping to
738 pressure piping was approximately \$1.5 million of the \$2.62 million in reductions. She stated
739 that that this left \$1.1 million. She asked if this was a long list of small items.

740
741 Ms. Whitaker stated yes, mostly. She stated that they were able to come up with some cost
742 savings on the building envelope by clarifying the specifics on it. She stated that there was a
743 section of pipe that they had originally planned to have several treatments, including poly
744 wrapping and zinc coating; however, they decided not to zinc coat certain sections. She stated
745 that it was a laundry list of \$150,000 items such as that. She stated that she could provide the full
746 list if Ms. Hildebrand would like.

747
748 Ms. Hildebrand asked if the engineer helped coordinate all of that.

749
750 Ms. Whitaker stated yes. She stated that both teams' engineers reviewed these items. She stated
751 that they had three conference calls as well as a few other calls in between to work through the
752 details of where they could look for some opportunities.

753
754 Mr. Richardson asked if it was staff's recommendation that the Board increase the budget by
755 \$15.5 million and award the project to the bidder.

756
757 Ms. Whitaker stated that there were two projects embedded in one, and each one had an increase.
758 She stated that they needed a motion to award the contract and the contingency, as well as to
759 increase the capital budget for the pipeline project as well as the pump station project.

760
761 Mr. Gaffney asked if there were three separate amendments or a single amendment that
762 encompassed all three.

763
764 Ms. Whitaker stated that she believed they could do them all in one so long as it was clear.

765
766 Mr. Pinkston asked if they would see the impact to the CIP in the spring.

767
768 Mr. Mawyer stated yes.

769
770 Ms. Whitaker stated that staff was beginning to review the other projects in the CIP to try to
771 assess the potential implications.

772
773 Mr. Mawyer stated that they had the Central Water Line scheduled to be bid in January, which
774 would provide another significant budget data point. He stated that this information would be
775 incorporated into the next year's five-year CIP, helping them determine where they needed to go,
776 what their rates and charges would be, and whether they needed to reconsider some of the
777 projects they were undertaking. He stated that specifically, they were prioritizing the three
778 waterline projects, including this one, the Central Water Line, and the Rivanna to Ragged
779 projects, as they aligned with their community water supply plan, which had been on the books

780 for a long time.

781

782 Mr. Pinkston asked how they were going to do this.

783

784 Mr. Richardson asked if Ms. Long had any advice on how they should handle this.

785

786 Ms. Long stated that they could hold three separate votes, which would likely be the most
787 conservative approach.

788

789 Mr. Mawyer stated that both the second and third items were for the construction contracts, so if
790 they did not get the money for one of those two, they could not do the construction contract. He
791 stated that they would like them to be all together. He stated that one awarded the contract to the
792 contractor, and the second and third amended the CIP and budgets to fund the project.

793

794 Mr. Richardson stated that his suggestion would be to vote on the second and third items with
795 one motion, and then the Board could take up the motion to award the contract.

796

797 **Mr. Richardson moved that the Board approve the amendment to the FY 25-29 CIP for the**
798 **Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line**
799 **Project, increasing the budget by \$7.26 million, bringing the total budget for this project to**
800 **\$40,760,000, and to approve the amendment to the FY 25-29 CIP for the Ragged Mountain**
801 **Raw Water Pump Station Project to increase the budget by \$8.3 million, bringing the total**
802 **budget for this project to \$20,730,000. Ms. Mallek seconded the motion, which carried**
803 **unanimously (7-0).**

804

805 **Mr. Richardson moved that the Board authorize the Executive Director to award the**
806 **construction contract to Thalle Construction Company for a total negotiated value of**
807 **\$53,908,400, and any change orders to the construction contract necessary for completion**
808 **of the work not to exceed 10% of the original construction contract award. Ms. Mallek**
809 **seconded the motion, which carried unanimously (7-0).**

810

811 Mr. Pinkston asked when staff would have a pricing estimate for the Ragged to South Fork
812 project.

813

814 Ms. Whitaker stated that they would be bidding in October of 2025. She stated that they were at
815 50% to 60% design completion now.

816

817 Mr. Pinkston asked what the schedule was for the Central Water Line Project.

818

819 Ms. Whitaker stated that they would be bidding at the end of the year.

820

821 Mr. Mawyer stated that they would receive bids in January and hopefully would be before the
822 Board in January or February to approve the award for the Central Water Line Project.

823

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

826 Scott Schiller, Engineering Manager, stated that he would be presenting the major capital
827 projects update to the Board. He stated that they would begin with projects currently under
828 construction. He stated that the Rivanna Pump Station Restoration Project had been discussed at
829 length over the past few months. He stated that a control malfunction occurred at the facility on
830 January 9 during a wet weather event, causing the dry well to be inundated with water and
831 affecting the pumps and the electrical equipment. He stated that shortly thereafter, they set up a
832 bypass pump system to maintain flow to the treatment plant and facilitate rehab work within the
833 pump station.

834
835 Mr. Schiller stated that they had been working collaboratively with Hazen and Sawyer, SEH, and
836 MEB to design and construct these improvements simultaneously. He stated that they anticipated
837 the work to be completed by May 2025, although this was part of the full project. He stated that
838 they planned to have the bypass pumps removed by February, which cost approximately
839 \$330,000 per month to rent. He stated that removing them would result in a significant cost
840 savings. He stated that the estimated budget for the project was between \$20 and \$22 million,
841 developed shortly after the incident.

842
843 Mr. Schiller stated that the dollar value included not only the rehab of the facility but also the
844 betterment work to prevent similar incidents in the future. He stated that the estimated
845 reimbursement from VRSA via an insurance claim was around \$10.5 million, which brought
846 them back to the January 8 conditions. He stated that currently, the pricing for the project had
847 been efficient, and staff was hopeful that the total budget number would decrease, but they were
848 not yet in a position to adjust it. He stated that they were proceeding as efficiently as possible.

849
850 Mr. Schiller stated that next, he would discuss the 5KV electrical system upgrade. He stated that
851 this was to replace major electrical equipment at this plant, which was nearing the end of its
852 serviceable life, including motor control centers, transformers, and the installation of a new
853 switchgear building, as shown on the screen. He stated that the new switchgear building was
854 being brought in and installed.

855
856 Mr. Schiller stated that they had experienced significant equipment delays on this project due to
857 the pandemic and issues discussed during the last Board meeting regarding duct banks. He stated
858 that to provide a visual aid, he would like to show a picture of the wiring and cabling, which
859 consisted of approximately 2- to 3-inch diameter cabling being pulled through the conduits. He
860 stated that as previously discussed, excessive bends in the conduits could make it difficult to pull
861 the cable, leading to the modification. He stated that due to the delays, they were now
862 anticipating completion of this project in June 2025 and a budget of \$5.6 million.

863
864 Mr. Schiller stated that the Airport Road Pump Station and Piping Project, which aimed to
865 reliably interconnect the urban water system with the Piney Mountain pressure zone, was also
866 underway. He stated that the completed pump station was what they were currently viewing. He
867 stated that they were currently in the demonstration period, which, if successful, would enable
868 them to put the pump station into operation. He stated that they were listing this month as the
869 completion schedule. He stated that the project had a budget of \$10 million.

870
871 Mr. Gaffney asked if that meant the North Rivanna Water Treatment Plant was no longer

872 required once the project was fully operational.

873

874 Mr. Schiller stated that the agreement they had with the Service Authority was that they needed
875 both the Airport Road Pump Station completed and the second South Rivanna River Crossing
876 installed before they could decommission that facility. He stated that their operations group
877 would have more flexibility in operating the plant with to the pump station in service. He stated
878 that they were considering a schedule of five days on and two days off, or vice versa, as they
879 could not allow the treatment plant to sit idle for an extended period, which would compromise
880 its capabilities. He stated that once the South Rivanna River Crossing was completed, they could
881 begin the decommissioning process.

882

883 Mr. Schiller stated that next was the Red Hill Water Treatment Plant Upgrades Project. He stated
884 that the current facility was a well house and hydropneumatic tank. He stated that the facility
885 contained a significant amount of chemicals, and the intent of this project was to add additional
886 chemical storage, monitoring, and automation equipment, as well as include granular activated
887 carbon (GAC) treatment. He stated that they had received bids at the end of last year, but the one
888 bid they received was significantly over budget. He stated that they had worked with the
889 contractor to reduce costs, revising the building expansion layout to achieve this.

890

891 Mr. Schiller stated that the recommended prefabbed structure resulted in a more cost-effective
892 solution. He stated that they had revised the layout and submitted the revised site plan to the
893 County for approval. He stated that they were awaiting their response before commencing
894 construction, which was initially expected to begin this month. He stated that the project was
895 scheduled to be completed in March 2026, with a budget of \$2 million, which included the cost
896 reduction achieved through collaboration with the contractor. He stated that the project was
897 100% funded by ACSA, with an additional \$400,000 provided by the County via a grant related
898 to ARPA during the pandemic.

899

900 Mr. Schiller stated that next was the South Fork Rivanna River Crossing. He stated that the
901 second pipe across the South Rivanna River was a high density polyethylene (HDPE) pipe to be
902 installed via horizontal directional drilling methods. He stated that the yellow line on the map
903 represented the horizontal directional drill length, while the blue lines indicated standard ductile
904 iron pipe installed via open cut methods. He stated that they had previously presented this to the
905 Board last month for award to Faulconer Construction, and they were working with them to
906 establish a notice to proceed date and a pre-construction meeting. He stated that they anticipated
907 on-site construction activities to begin in January 2025 and continue through January 2027, with
908 a budget of \$7.3 million.

909

910 Mr. Schiller stated that finally, they had the Ragged Mountain Reservoir to Observatory Water
911 Treatment Plant Water Line and Pump Station project. He stated that he would not belabor the
912 details of this project, as there had already been significant discussion on this topic. He stated
913 that they were looking forward to initiating this project and beginning the process with Thalle
914 Construction.

915

916 Mr. Schiller stated that next, he would discuss the design phase and upcoming construction
917 projects. He stated that the Crozet Pump Station Rehabilitation Project involved rehabilitating

918 the four pump stations that conveyed flow from the town of Crozet to their urban wastewater
919 collection system. He stated that these pump stations were interconnected, so upgrading one
920 station required upgrading all of them.

921
922 Mr. Schiller stated that this project entailed replacing the pumps, valves, roofs, motor control
923 centers, generators, automatic transfer switches, and PLCs. He stated that it was a comprehensive
924 upgrade of the pump stations, which had been in use for over 40 years. He stated that the bids for
925 this project were currently out, with a deadline of October 31, and they anticipated construction
926 to begin in April 2025 and continue through September 2027, with a budget of \$11 million.

927
928 Mr. Schiller stated that the Central Water Line project aimed to improve water flow pressure in
929 the urban system by connecting the Observatory Water Treatment Plant directly to the Pantops
930 area. He stated that this project involved approximately five miles of 24- and 36-inch pipe, as
931 well as two railroad crossings. He stated that they were approximately 90% complete with the
932 design of phase one, which spanned from Observatory to the point where they interconnected
933 with East High Street.

934
935 Mr. Schiller stated that per previous discussions, they had decided to relocate the water line from
936 East High Street into a City parcel, as well as a couple of other easements. He stated that as a
937 result, they were considering this work as phase two. He stated that phase one would be
938 advertised in late November and early December, with bids due in January. He stated that phase
939 two was expected to be advertised next summer. He stated that construction for phase one was
940 anticipated to take place from May 2025 to March 2029, with a current budget estimate of \$47
941 million, which would be discussed in January.

942
943 Mr. Schiller stated that the next project was the Ragged Mountain Reservoir Pool Raise, also
944 previously mentioned, which would raise the normal pool of the reservoir 12 feet, from 671 feet
945 to 683 feet. He stated that it would provide an additional 700 million gallons in capacity to the
946 reservoir. He stated that the project involved predominantly tree clearing around the reservoir,
947 along with minor improvements and modifications to the intake tower.

948
949 Mr. Schiller stated that a minor geotechnical investigation of the earthen dam would also be
950 performed as a due diligence measure, due to the increased head pressure on the dam. He stated
951 that this investigation included electrical resistivity imaging to assess the condition of the dam.
952 He stated that the project was at 30% design, construction was anticipated to take place from
953 September 2025 to September 2026, with a budget of \$5 million.

954
955 Mr. Schiller stated that the South Rivanna to Ragged Mountain Pipeline Intake Facilities Project
956 included a six-mile pipeline from the reservoir and water treatment plant to the northern end of
957 the Birdwood water main, installed near the renovated golf course. He stated that the project also
958 included a 41 MGD pump station intake facility, designed to replace the existing intake and
959 pump station. He stated that they were currently at approximately 50% design, as previously
960 mentioned. He stated that construction was anticipated to take place from February 2026 to
961 December 2030, with a currently estimated budget of \$80 million, which may need to be revised
962 based on available data.

963

964 Mr. Pinkston asked if the pump station was located near the dam.

965
966 Mr. Schiller stated yes. He stated that there was a parking area and boat ramp near the location.

967
968 Mr. Mawyer stated that it was City property that they had leased, which was intended for public
969 use, although it would eventually be repurposed due to the construction of the new pump station.

970
971 Mr. Schiller stated that he believed that there were plans for future public access to the reservoir
972 at another location, so they were working to coordinate with others to ensure that this was taken
973 into consideration. He stated that the next project was the expansion of granular activated carbon
974 at the Crozet Water Treatment Plant. He stated that this would involve the construction of an
975 additional building and expansion of their GAC system, increasing the GAC treatment capacity
976 from 1 MGD to 2 MGD.

977
978 Mr. Schiller stated that the two existing vessels currently in the facility, which were smaller than
979 the ones they typically installed, would be maintained with additional larger vessels installed in
980 the new building. He stated that the new building would be located within the ACSA storage
981 area, and staff was working closely with ACSA to coordinate that. He stated that they were
982 currently at approximately 60% design completion for this project, with construction scheduled
983 to begin in August 2025 and be completed by March 2027. He stated that they had secured a
984 grant from VDH for \$6.24 million, which would cover a significant portion of the overall budget
985 of \$6.6 million, which was a substantial investment.

986
987 Mr. Mawyer stated that they were plus 15 and minus 6 in terms of their budgeting standpoint.

988
989 Mr. Schiller stated that next, they would be moving onto South Rivanna for the powdered
990 activated carbon (PAC) upgrades. He stated that this project involved installing a new PAC silo
991 with feed pumps to replace the existing one. He stated that the existing silo on site was actually a
992 repurposed lime silo, which had had two previous uses and was now ready for retirement. He
993 stated that they were proceeding with the design for this project, which was currently
994 approximately 100% complete.

995
996 Mr. Schiller stated that they had been notified that they were being considered for a
997 congressionally directed spending grant of \$880,000. He stated that as a result, they were holding
998 off on the bidding process until they determined whether this grant would be awarded to them.
999 He stated that this may impact their construction schedule, which was currently planned for
1000 August 2025 to December 2026, and their total budget, which was estimated at \$1.1 million.

1001
1002 Mr. Mawyer stated that the grants required them to be shovel-ready and prepared to go, but they
1003 should not spend any money until they had approved it. He stated that he believed it was taking
1004 years for some of these grants to be finalized.

1005
1006 Mr. Schiller stated that it was so they could add in a number of other requirements that they
1007 needed to consider. He stated that moving onto the Moores Creek facility, this project involved
1008 structural and concrete rehabilitation, including repairs throughout the facility. He stated that
1009 they would be conducting concrete repairs in the holding ponds, which were located on the west

1010 side of the campus.

1011
1012 Mr. Schiller stated that they would also be working on the EQ basins, situated on the other side
1013 of the admin building, and the digester facility, which was located on the opposite side of the
1014 campus. He stated that the compost shed, now considered an equipment shed, would undergo
1015 roof replacement, and they would also be implementing a monorail system to improve the
1016 removal of pumps in the aeration basins. He stated that they had reached 100% design for this
1017 project and planned to advertise it next month, with construction scheduled to take place between
1018 February 2025 and May 2027, and a budget of \$11.3 million.

1019
1020 Mr. Schiller stated that also at the Moores Creek facility, they had the Building Upfits and
1021 Gravity Thickener Improvement Project. He stated that this project involved the renovation of
1022 existing wastewater operations and maintenance buildings, which dated back to the 1980s and no
1023 longer met their current staffing or operational needs. He stated that the renovation would
1024 include the creation of office space, meeting rooms, lunch rooms, break rooms, and conference
1025 rooms.

1026
1027 Mr. Schiller stated that furthermore, they would be improving the gravity thickener system,
1028 including chemical feed system upgrades and adding clean-outs to the sludge pump suction lines
1029 to facilitate cleaning. He stated that a rendering of the proposed renovation was available,
1030 depicting a reconstructed maintenance facility, which would include offices, a conference room,
1031 and a break room. He stated that they were approximately 90% designed for this project, and
1032 they planned to advertise it in November, followed by a similar construction period from
1033 February 2025 to December 2026, with an overall budget of \$7.5 million.

1034
1035 Mr. Schiller stated that also at Moores Creek, they had recently undertaken the Administration
1036 Building Renovation project, which shared similarities with the upfits project. He stated that the
1037 building they were currently in was constructed in the 1980s as part of the main plant
1038 construction process and was in need of an interior renovation and expansion to accommodate
1039 their growing operations. He stated that the new building or modified building would feature a
1040 new boardroom, an educational exhibit center, and updated lab space, in addition to other
1041 required offices.

1042
1043 Mr. Schiller stated that the exhibit space had undergone refinement during the design process,
1044 and they had revised the layout to better incorporate it into the building and its design. He stated
1045 that these renderings represented the conclusion of that revised layout process. He stated that
1046 they had the most current renderings available, showing the east-facing wall layout and the
1047 north-facing side of the structure. He stated that they were at 75% design for the Administration
1048 Building Renovation project, with construction anticipated between June 2025 and December
1049 2027, and a current budget of \$25 million.

1050
1051 Mr. Schiller stated that the Beaver Creek Dam Pump Station Piping Modifications Project
1052 involved upgrading their existing spillway to meet Department of Conservation and Recreation
1053 (DCR) dam safety standards. He stated that the intended design for the spillway was a labyrinth
1054 spillway, the elaborate zigzag structure, which they were showing on the slide. He stated that as
1055 a result of the spillway construction process, they would need to replace the current raw water

1056 pump station, located downstream of the spillway.

1057
1058 Mr. Schiller stated that this project also included a new raw water pump station located to the
1059 west of the dam and the replacement of the raw water line that went to the treatment plant, which
1060 was currently asbestos cement and needed to be taken out of commission. He stated that they
1061 were at 50% design for this project, with construction anticipated between May 2026 and
1062 January 2030, and they were anticipating a federal National Resources Conservation Service
1063 (NRCS) grant for this project, currently estimated at \$17 million. He stated that the total project
1064 budget was \$47 million.

1065
1066 Mr. Pinkston asked if VRSA was going to give them \$10.5 million as reimbursement for the
1067 Rivanna Pump Station Restoration.

1068
1069 Mr. Schiller stated that they had developed an estimate for the rehab components, which
1070 included the initial evaluation, response, setup of bypass pumps, payment for bypass pumps,
1071 investigation work, design work related to the rehab components, and construction work related
1072 to the rehab components. He stated that this process was challenging, as they had to sift through
1073 the information from their consultants and contractors to break it down. He stated that after going
1074 through this process, they arrived at an estimated cost of approximately \$10.5 million. He stated
1075 that VRSA were conducting their own analysis to verify their value. He stated that they would
1076 then meet to discuss any discrepancies and determine the next steps. He stated that it was worth
1077 noting that these estimates were preliminary and may change; if the final cost ended up being
1078 \$12 million, they could revisit the process at the end.

1079
1080 Mr. Mawyer noted that they had been reimbursed \$3.8 million from the insurance company for
1081 the rehab work. He stated that this was not an addition to the overall total, but rather a portion of
1082 the \$10.5 million that had been reimbursed, with \$3.8 million being the amount that had been
1083 received so far.

1084
1085 Ms. Mallek stated that to clarify, the insurance coverage only replaced what was already in place,
1086 and the additional \$10 million was intended to prevent future disasters from occurring.

1087
1088 Mr. Schiller stated that was correct. He stated that their estimated costs for the rehabilitation
1089 work were greater than what they were currently spending. He stated that therefore, he believed
1090 that the total budget would have some room for improvement. He stated that based on the current
1091 information, the estimated cost for the rehab was \$10.5 million.

1092
1093 Mr. Gaffney asked if Mr. Mawyer had included the entire \$20 million into their budget.

1094
1095 Mr. Wood stated that they had put the whole project in the CIP and built it into the rates to
1096 receive \$10 million from insurance.

1097
1098 Mr. Gaffney asked if they were planning on receiving \$10 million.

1099
1100 Mr. Wood stated that was correct. He stated that the budget anticipated \$10 million from
1101 insurance recovery, and another \$10 million from the bond issue. He stated that the bond issue

1102 was already there to pay for it and was built into the rate.

1103
1104 Mr. Schiller stated that he wanted to show the Board some pictures from September. He stated
1105 that what they would see was that they had temporary lines running across the plant, which was a
1106 result of their efforts to replace the headworks valves located just outside this building. He stated
1107 that if they had seen the construction effort, they would know that they were essentially creating
1108 a bypass for the bypass, which typically occurred during early evening and early morning hours,
1109 once a week. He stated that they had one more of these bypasses to complete, and so far, they
1110 had had two successful replacements.

1111
1112 Ms. Mallek stated that they had mentioned the geotechnical work being done at Ragged Dam.
1113 She stated that it was originally designed for a full depth, but then modified to accommodate the
1114 changes.

1115
1116 Mr. Schiller stated that was correct. He stated that they were conducting a thorough review for
1117 due diligence to ensure that all necessary steps had been taken and potential issues had been
1118 identified before they proceeded with increased pressure.

1119
1120 Ms. Mallek asked if the solar panels at the Ragged Pump Station could operate off-grid. She
1121 stated that it would be greatly beneficial if the generator on the site could keep going during
1122 Dominion Power outages.

1123
1124 Ms. Whitaker stated that there would be a generator, regardless of whether the solar system
1125 could run independently of it. She stated that they may need the generator to be operational in
1126 order for the system to function properly, but they would need to investigate this further.

1127
1128 Mr. Pinkston asked how the controls would work at the pump station at Ragged Mountain.

1129
1130 Mr. Schiller stated that there would be a fiber line, so they would have communication with
1131 everyone.

1132
1133 **10. OTHER ITEMS FROM BOARD/STAFF NOT ON AGENDA**

1134
1135 There were no items to discuss.

1136
1137 **11. CLOSED MEETING**

1138
1139 **Ms. Mallek moved that that the Rivanna Water & Sewer Authority enter into a closed**
1140 **session to discuss confidential information related to the terms of a purchase and sale**
1141 **agreement or the terms of a lease agreement pertaining to the acquisition or lease of real**
1142 **property located in the City of Charlottesville, Virginia, where discussion or consideration**
1143 **of the acquisition or lease of real property for a public purpose in an open session would**
1144 **adversely affect the bargaining position or negotiating strategy of the Rivanna Water and**
1145 **Sewer Authority, as permitted by the exemptions at Section 2.2-3711-A(3) of the Code of**
1146 **Virginia. Mr. Pinkston seconded the motion, which carried unanimously (7-0).**

1147

1148 **Mr. Pinkston moved that The Rivanna Water and Sewer Authority hereby certifies by**
1149 **recorded vote that, to the best of each member’s knowledge, only public business matters**
1150 **lawfully exempted from the open meeting requirements of the Virginia Freedom of**
1151 **Information Act, and those public business matters as were identified in the motion**
1152 **authorizing the closed meeting were heard, discussed or considered in the closed meeting to**
1153 **which this certification resolution applies. Ms. Mallek seconded the motion, which carried**
1154 **unanimously (7-0).**

1155
1156 **12. ADJOURNMENT**

1157
1158 **At 4:05 p.m., Mr. Sanders moved to adjourn the meeting of the Rivanna Water and Sewer**
1159 **Authority. Mr. Pinkston seconded the motion, which carried unanimously (7-0).**

1160
1161 Respectfully submitted,

1162
1163
1164
1165



Mr. Sam Sanders
Secretary - Treasurer

