



RWSA BOARD OF DIRECTORS
Minutes of Regular Meeting
October 26, 2021

A regular meeting of the Rivanna Water and Sewer Authority (RWSA) Board of Directors was held on Tuesday, October 26, 2021 at 2:15 p.m. via Zoom.

Board Members Present: Mike Gaffney, Jeff Richardson, Lauren Hildebrand, Gary O’Connell, Lloyd Snook, Liz Palmer.

Board Members Absent: Chip Boyles.

Rivanna Staff Present: Lonnie Wood, Katie McIlwee, Deborah Anama, Jennifer Whitaker, David Tungate, John Hull, Patricia Difibaugh, and Scott Schiller.

Attorney(s) Present: Carrie Stanton.

1. CALL TO ORDER

Mr. Gaffney called the October 26, 2021, regular meeting of the Rivanna Water and Sewer Authority to order at 2:17 p.m.

2. STATEMENT FROM THE CHAIR

Mr. Gaffney read the following statement aloud:

“This is Mike Gaffney, Chair of the Rivanna Water and Sewer Authority.

“I would like to call the October 26, 2021, meeting of the Board of Directors to order.

“Notwithstanding any provision in our Bylaws to the contrary, as permitted under the City of Charlottesville’s Continuity of Government Ordinance adopted on March 25, 2020, Albemarle County’s Continuity of Government Ordinance adopted on April 15th, 2020, and revised effective October 1, 2020, and Chapter 1283 of the 2020 Acts of the Virginia Assembly effective April 24, 2020, we are holding this meeting by real-time electronic means with no Board member physically present at a single, central location.

“All Board members are participating electronically. This meeting is being held pursuant to the second resolution of the City’s Continuity of Government Ordinance and Section 6 of the County’s revised Continuity of Government Ordinance. All Board members will identify themselves and state their physical location by electronic means during the roll call which we will hold next. I note for the record that the public has real-time audio-visual access to this meeting over Zoom as provided in the lawfully posted meeting notice and real-time audio access over telephone, which is also contained in the notice. The public is always invited to send questions, comments, and suggestions to the Board through Bill Mawyer, the Authority’s Executive Director, at any time.”

Mr. Gaffney called the roll.

47 Ms. Lauren Hildebrand stated she was located at 305 4th Street Northwest in Charlottesville, VA.

48

49 Mr. Gary O’Connell stated he was located at the ACSA offices at 168 Spotnap Road,
50 Charlottesville, VA.

51

52 Dr. Liz Palmer stated she was located in Albemarle County on Mechum Banks Drive,
53 Charlottesville, VA.

54

55 Mr. Jeff Richardson stated he was located at the County Administration Building at 401 McIntire
56 Road in Charlottesville, VA.

57

58 Mr. Lloyd Snook stated he was located at 408 East Market Street, Charlottesville, VA.

59

60 Mr. Mike Gaffney stated he was located at 3180 Dundee Road in Earlysville, VA.

61

62 Mr. Gaffney stated the following Authority staff members were joining the meeting electronically:
63 Lonnie Wood, Jennifer Whitaker, David Tungate, Patricia Defibaugh, Scott Shiller, John Hull,
64 Deborah Anama, and Katie McIlwee.

65

66 Mr. Gaffney stated they were also joined electronically by Carrie Stanton, Counsel to the Authority.

67

68 **3. MINUTES OF PREVIOUS BOARD MEETINGS**

69 *a. Minutes of Regular Board Meeting on September 28, 2021*

70

71 Mr. Gaffney asked if Ms. Stanton would detail the changes to the Board minutes that were sent
72 out.

73

74 Ms. Stanton stated she had three clarifications, and what was circulated to the Board indicated
75 convention for the code section references in lines 312 and 328. She stated there were no
76 substantial changes, just where the periods and dashes should be in Section 2.2-3711-A(1) of the
77 Code of Virginia and Section 2.2-3712(D) of the Code of Virginia. She stated that Line 28
78 should be September 28, 2021, and there were some clarifications starting on Line 312 to “so
79 move” for the state of purpose.

80

81 Mr. Gaffney asked if there were any comments or other changes from Board members.

82

83 **Dr. Palmer moved that the Board approve the minutes of the September 28, 2021 meeting**
84 **as amended by Ms. Stanton. The motion was seconded by Mr. O’Connell and passed 6-0.**

85

86 **4. RECOGNITIONS**

87 Mr. Gaffney stated the next item was a resolution for appreciation of Chip Boyles, and he read
88 the resolution into the record:

89

90 WHEREAS, Mr. Boyles has served as a member of the Rivanna Water & Sewer
91 Authority and Rivanna Solid Waste Authority Board of Directors since February of 2021; and
92 WHEREAS, over that same period Mr. Boyles has demonstrated leadership in water and

93 sewer, solid waste and recycling services; and has been a valuable member of the Boards of
94 Directors and a resource to the Authorities; and

95 WHEREAS, Mr. Boyles's understanding of the water, sewer, solid waste and recycling
96 operations of the City of Charlottesville, the Water & Sewer Authority and the Solid Waste
97 Authority has supported a strategic decision-making process that provided benefits to the
98 customers served by the City of Charlottesville as well as the community as a whole; and
99 WHEREAS, the Water & Sewer Authority and Solid Waste Authority Boards of Directors are
100 most grateful for the professional and personal contributions Mr. Boyles has provided to both
101 Authorities and to the community.

102 NOW, THEREFORE, BE IT RESOLVED that the Rivanna Water & Sewer Authority
103 and the Rivanna Solid Waste Authority Boards of Directors recognize, thank, and commend Mr.
104 Boyles for his distinguished service, efforts, and achievements as a member of the Rivanna
105 Water & Sewer Authority and the Rivanna Solid Waste Authority, and present this Resolution as
106 a token of esteem, with their best wishes in his future endeavors.

107
108 BE IT FURTHER RESOLVED that this Resolution be entered upon both the permanent
109 Minutes of the Rivanna Water & Sewer Authority and the Rivanna Solid Waste Authority.

110
111 **Mr. Snook moved to approve the resolution, which was seconded by Mr. O'Connell. The**
112 **motion passed 6-0.**

113
114 **5. EXECUTIVE DIRECTOR'S REPORT**

115
116 Mr. Lonnie Wood reported that there were a few recognitions under the strategic plan goal of
117 workforce development. He stated that Ceara Schwake, Jeremy Lawson, and Duane Houchens
118 had all passed their respective water operator tests, which qualifies them for a promotion. He
119 stated he would like to congratulate them and stated he knew they had worked hard to
120 accomplish that. He stated he would skip over to the strategic plan goal for communication and
121 collaboration and let Ms. Whitaker address the infrastructure. He stated that under public
122 outreach for the communication goal, Ms. Whitaker had given a presentation to the UVA civil
123 engineering class on water resource and public sector engineering. He stated that the previous
124 week, three employees had participated in the United Way Day of Caring: Betsy Nemeth, Dyon
125 Vega, and Victoria Fort participated in a Moormons River cleanup, along with Thomas Jefferson
126 Trout Unlimited and Therapeutic Adventures.

127
128 Ms. Whitaker reported that one of the things Mr. Mawyer had wanted to highlight was that the
129 second Beaver Creek Reservoir dam pump station and piping modification public meeting had
130 been held online on October 6. She stated about 30 members of the public had participated, in
131 addition to members of the County staff and NRCS. She stated they were also beginning the
132 design on the central water line pipe, which would be a 24- and 30-inch pipeline that traverses
133 from the Observatory Water Treatment Plant over to approximately Free Bridge, and discussions
134 of funding allocations for that project were also underway. She stated as many of them knew,
135 easements were being worked on for the south Rivanna Ragged Mountain pipeline and the
136 Ragged to Observatory pipeline and pump station. She stated that the easement just signed was
137 with Trinity Presbyterian Church, which was just off of Reservoir Road, and they were working
138 on an agreement with the Department of Forestry as well. She stated there was one final private

139 owner they were working with along with UVA and the UVA Foundation. She stated they were
140 making some headway with both UVA and the Foundation and had several meetings in the last
141 few weeks, exchanging some concepts and drawing ideas. She stated also being worked on was
142 the section of what was called Birdwood to Garth Road, which is the west section of the South
143 Rivanna Ragged Mountain pipeline that is in the Ivy Road corridor, and they were working on
144 the last easement for this project.

145
146 Mr. Gaffney asked if there were any comments or questions on the Executive Director’s report.
147 Hearing none, he moved on to items from the public.

148
149 **6. ITEMS FROM THE PUBLIC**
150 Mr. Gaffney opened the meeting to the public. He asked that speakers identify themselves for the
151 public record.

152
153 Ms. Dede Smith introduced herself as a resident 2652 Jefferson Park Circle in the City. She
154 stated she would like to make a brief comment about the central water line discussion that was on
155 the agenda today and had just been heard about from Ms. Whitaker. She stated she would like to
156 relay a little story before she asked her questions. She stated after the Unite the Right rally when
157 the *New York Times* and *ProPublica* came to town to look at education, they sought out people
158 who had a history with it.

159
160 Ms. Smith stated that to her, they stated that they kept hearing the two words “northside” and
161 “southside,” and they did not understand what that meant. She stated that people referred to it
162 when referring to the elementary schools, and Mr. Snook would understand that. She stated that
163 what she stated to them was that it basically meant that generally, above and below the railroad
164 tracks, which bisect the City east to west. She stated the two young women asked if there was an
165 actual railroad track. She stated it was sort of funny because they only knew of “other side of the
166 tracks” as an expression.

167
168 Ms. Smith stated that the central water line route as it was now, from point A to point B, was
169 entirely on the north of the railroad tracks, but the pipeline route immediately goes south to
170 under the railroad tracks and made the southside roundabout way, goes back under the railroad
171 tracks, to the northside. She stated that her question was if they would see more alternative routes
172 that were more direct, which would almost de facto make it shorter—which she assumed would
173 relate to costs. She asked if they would see alternative routes, costs, and impacts associated with
174 them. She stated she would hope that the rationale for a route would not be that was the way it
175 had always been, because that did not speak well to their history.

176
177 Ms. Smith stated her second question was really for City officials, and that was if they would
178 work with City government to see if they could combine digging up the road, which appeared to
179 all be on public roads, with West Main Street, which would be a potential route to underground
180 utilities, or if it could be combined with the Ridge McIntire project. She stated these were just
181 projects she knew about, and she was most concerned that they considered alternative routes.

182
183 Mr. Gaffney thanked Ms. Smith. He asked if there were any other speakers from the public.
184 Hearing none, Mr. Gaffney closed the items from the public.

185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214

215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230

7. RESPONSES TO PUBLIC COMMENT

Mr. Gaffney asked if there were any Board members that would like to speak to Ms. Smith’s comments. He stated that normally they would leave that to follow up in their next Board meeting, and with Mr. Mawyer out, that may be more appropriate. He invited comments from Board members.

Ms. Snook stated that he wanted to comment briefly in response to Ms. Smith’s comments. He stated that certainly one of the things that had been discussed in the past and may well again be discussed in the future was the question of whether the central waterline improvement could be made to run down West Main Street. He stated the thought had been expressed at various points that if they were going to be digging up West Main Street anyway for the West Main streetscape project, that that would be a logical time to do that. He stated the catch was that at that point, the West Main streetscape project had been taken off the City’s capital improvement plan—mainly because they were going to be spending \$75 million to renovate Buford Middle School and would not have capital funds available for that kind of thing. He stated the West Main route certainly was something he knew had been contemplated by both City government and the RWSA, but it did not seem at all likely at this point.

8. CONSENT AGENDA

Mr. Gaffney asked if there were any items Board members wanted to pull for comments or questions.

Dr. Palmer moved that the Board approve the Consent Agenda. Mr. O’Connell seconded the motion, which passed 6-0.

9. OTHER BUSINESS

a. Presentation and Public Hearing on Wastewater Rates and Charges for FY21-22

Mr. Wood reported that every five years, the Authority was required to assess the wastewater flows coming into the Authority’s system from the City and the County, per the 2014 wastewater project cost-allocation agreement. He stated they would meter certain points on the system where the City’s sewer lines intercepted with theirs and/or the County’s. He stated the flow coming in was measured, and the consultants took the data and modeled it for an average daily flow and a peak flow based on a two-year weather event. He stated what the data showed, which Ms. Whitaker had presented in August and was shown currently on the screen, was that they had some significant decreases in flow because they had been making investments in rehabilitating the sewer pipe systems and their sewer facilities. He stated the City’s effort had reaped the most benefit, with very significant reduction in flow.

Mr. Wood stated that what that translated into, which Mr. Mawyer had presented in the last RWSA Board meeting, was a shift in cost between the City and the County. He stated that cost shift was about \$434,000 per year for those projects that were covered under that agreement. He stated that in September, they presented a preliminary rate schedule for the Board to adopt, which they had. He stated that they advertised the rates, and now they were at the point where they

231 would need a public hearing and adoption of the attached resolution in the Board packet. He
232 stated the rate was effective October 1 but would be retroactively applied to the July through
233 September bills. He stated those bills had already gone out and had been paid, so the rate could
234 not be changed going back to July, but what could be done was adjust the bills as if the rates
235 were in effect in July. He stated that would be about a \$108,000 adjustment from the City to the
236 County on the October bill. He asked if there were any questions.

237
238 Mr. Gaffney opened the public hearing.

239
240 There were no members of the public that identified that they wished to speak.

241
242 Mr. Gaffney closed the public meeting and asked if there were any comments or questions from
243 the Board before voting on the resolution.

244
245 **Dr. Palmer moved that the Board approve the resolution of the proposed rates and charges**
246 **for Fiscal Year 21-22. Mr. Snook seconded the motion, which passed 6-0.**

247
248 *b. Industrial Waste Pretreatment Program; Patricia Defibaugh, Laboratory Manager*

249 Ms. Defibaugh greeted the Board and introduced herself as the new laboratory manager at
250 RWSA. She stated that today she would review the industrial waste pretreatment program. She
251 stated that the purpose of this program was to protect the sewer system and wastewater treatment
252 plants through limits on industrial waste discharges, which was a requirement of the EPA and the
253 Virginia Department of Environmental Quality.

254
255 Ms. Defibaugh explained that the Virginia pollutant discharge elimination system required that
256 Rivanna implement a pretreatment program that complies with the EPA's Clean Water Act. We
257 must submit a report to Virginia DEQ treatment program on January 31st of each year. She stated
258 that the pretreatment program looked at the following constituents: fats, oils, and greases, metals
259 including manganese, copper, lead, and heavy metals, nutrients including nitrogen and
260 phosphorous, pH, and biochemical oxygen demand.

261
262 Ms. Defibaugh stated that Rivanna proceeded to identify industrial users, as they were most
263 concerned with significant industrial users. She stated that these were either a categorical user,
264 metal-finishing semiconductor manufacturing, or non-categorical, discharging more than 25,000
265 gallons per day or having the potential to adversely affect their treatment processes. She stated
266 that businesses with processes that discharge pollutants of concern to the sewer system were
267 restaurants, breweries, wineries, dentists, and dry cleaners.

268
269 Ms. Defibaugh stated that there were three current industrial waste users: Virginia Diodes, Mikro
270 Systems, and Northrop Grumman. She stated the permits were issued to them on July 1st, 2019
271 and would expire on June 30, 2022. She stated each year, each industry was required to submit a
272 semi-annual report for the periods ending in June and December of each year. She stated that a
273 significant industrial user basically had four parts: an average flow of 25,000 GPD of process
274 wastewater; contributes a process waste stream that makes up 5% or more of the average dry
275 weather hydraulic or organic capacity of a treatment plant; is subject to categorical pretreatment
276 standards; or had a significant impact, either singularly or in combination with other significant

277 dischargers or the treatment works for the quality of its effluent.

278
279 Ms. Defibaugh stated that what was new with the industrial waste program was that in 2020, the
280 Virginia General Assembly enacted HB586, which required finding out how much PFAS, or per
281 and polyfluoroalkyl substances, they have in their wastewater. She stated DEQ would be sending
282 out a survey to Rivanna’s significant industrial users to confirm their use and manufacture of
283 PFAS compounds. She asked if there were any questions.

284
285 Dr. Palmer stated that Ms. Defibaugh had mentioned that the breweries were of some concern.
286 She asked why the breweries were on their sewer system now in this list that she had given them.
287 She asked her to talk a bit about breweries and why they would or would not be on this list.

288
289 Ms. Defibaugh stated she was pretty new at this job, but she believed it had to do with the
290 chemical composition of the waste they were discharging.

291
292 Dr. Palmer stated that made sense. She thanked Ms. Defibaugh.

293
294 Mr. Gaffney stated he had a follow-up question and asked Mr. O’Connell and Ms. Hildebrand to
295 weigh in. He asked if, for the businesses that were on that list that discharged less than 25,000
296 gallons, the City and the ACSA monitored the discharges from those businesses.

297
298 Mr. O’Connell responded that there was an active fats, oils, and grease (FOG) program, and in
299 their case, there were about 200 grease traps that they regularly inspected. He stated they were
300 mostly restaurants, but there were a few other users based upon their use quantities. He stated it
301 was part of a City and County program, and it was administered in the County and the City
302 administers a similar program for City businesses.

303
304 Ms. Hildebrand stated that any new assessment that comes in, they mirror what the requirements
305 are in the City code that Rivanna has. She stated they monitor those new businesses closely and
306 ensure they don’t suddenly fit into one of the significant user categories, and the City assists
307 Rivanna in that effort.

308
309 Mr. Gaffney asked if the assumptions were that there were no potential new businesses that
310 would be significant industrial users contemplated at this time.

311
312 Ms. Hildebrand stated that was correct from the City’s point of view.

313
314 Mr. Snook asked how big a restaurant was likely to be before it hit the 25,000 GPD threshold.
315 He stated there were hundreds and hundreds of restaurants, but none of them are on the list.

316
317 Mr. O’Connell replied that all those restaurants would be on the FOG, the grease trap list. He
318 stated some of them could be pretty small, but some are larger ones. He stated as Ms. Hildebrand
319 stated, as new development was occurring, the wastewater contents that come from that
320 particular business were reviewed and evaluated. He noted a restaurant would typically require a
321 grease trap—but that expanded to a number of other businesses as well.

322

323 Mr. Snook asked if it was included on the list because of the FOG requirements rather than the
324 water flows.

325
326 Ms. Hildebrand confirmed that this was correct. She stated typically, when they evaluated a
327 restaurant, it was usually allocated 25 GPD per seat. She stated there would have to be 1,000
328 seats in a restaurant; she stated she did not have it in front of her, but it was generally that kind of
329 level. She noted they usually do not hit that threshold.

330
331 Mr. Snook thanked Ms. Hildebrand.

332
333 *c. Major Capital Projects Construction Update; Scott Schiller, Engineering Manager*

334
335 Mr. Schiller greeted the Board and stated he would review the major projects construction update
336 and would also talk about a few significant design projects currently underway.

337
338 Mr. Schiller stated that he would first talk about some recently completed projects over the past
339 year. He stated the first was the Crozet Water Treatment Plan expansion, which was to increase
340 the plant's capacity to 1 MGD to 2 MGD. He stated it also improved their backwash storage
341 process, as well as added an extension to the existing GAC/chemical feed building. He stated
342 that they also added two new intermediate pumps into the GAC building, as well as adding a new
343 raw water pump and VFD to the raw water pump station. He stated while the project was to
344 increase the capacity of the treatment process components, they also added some pumping
345 capabilities upstream and downstream of the treatment process to make sure they can convey
346 water that out of the reservoir and into the system. He presented a slide of the new backwash
347 tank and the refurbished lagoon; the Power Activated Carbon contactors, flock basins, and
348 sedimentation basins, as well as new plate settlers, installed in the sedimentation basins to
349 increase the treatment capacity of the basins. He pointed out the new GAC building and chemical
350 extension with the new unloading dock.

351
352 Mr. Schiller stated the next slide showed the lower level of the filter building, which had new
353 piping and blower for the filter system. He stated there was a new bathroom with a locker, which
354 he thought the operators appreciated. He referenced another view of the plant where they could
355 see the new Power Activated Carbon silo, which was back by the water ball where they store the
356 backwash water. He stated that was finished in Crozet this past July with a cost of about \$8.5
357 million.

358
359 Mr. Schiller stated the South Rivanna Dam gate repairs and safety improvements consisted of
360 leakage through the two 36" mud gates on the north and south abutments that they wanted to
361 repair. He stated it was found there were some issues with the stem guides and actuators, so their
362 on-call maintenance contractor, Bander Smith, took care of it. He stated they also improved
363 access to both north and south towers. He stated they put in new aluminum ladders in the inside
364 towers, and they also installed a few anchor points and a new walkway and railing to get up to
365 the north tower. He stated if anyone had seen access to the north tower before, it was quite
366 daunting to get to that, so this was a much safer process to get to that tower. He stated this work
367 was completed in August 2021 at a cost of approximately \$400,000.

368

369 Mr. Schiller reported that the Sugar Hollow rubber crest gate replacement project was to replace
370 the rubber gate and some electrical mechanical components, which were all pretty much at the
371 end of their useful life. He referenced a slide showing the installation of the new bladder and
372 stated the new compressor was inside the dam structure itself, noting a picture of the bladder
373 inflated and the reservoir beginning to fill up again. He stated they had gone through some tests
374 of the bladder through a deflating and reinflating process, and everything was working pretty
375 well—with one minor leak in the bladder that had been repaired. He stated they were in the final
376 completion phase and would be done this fall, with a total cost of about \$1.7 million.

377
378 Mr. Schiller reported that for projects currently under construction, the Observatory and South
379 Rivanna water treatment plant improvement projects were to increase Observatory's capacity
380 from 7.7 MGD to 10 MGD and then increase the reliability of South Rivanna to be able to treat
381 12 MGD. He stated that the picture shown was of South Rivanna and was an aerial they had
382 taken recently. He stated the basins in the front were the sedimentation basins, and the smaller
383 basins adjacent to them were the flocculation basins. He stated there had been a lot of work to
384 improve mud valves and some sludge piping between all those basins. He stated in the back of
385 that image was the beginning of a new administration building at that plant for the water
386 department, noting that the filter building was larger than it was before. He stated they had added
387 two additional filters in that expansion. He stated that from a structural standpoint it was pretty
388 much complete; there was still some piping work to complete and the filters themselves. He
389 stated they also enclosed the liquid lime container, which was behind the filter building. He stated
390 the one other building behind the main filter plant, and adjacent to the GAC building was a new
391 fluoride and alum storage building. He stated improvements at South Rivanna were moving
392 along nicely.

393
394 Mr. Schiller presented some aerials of the Observatory site and stated work had really begun in
395 earnest there. He stated they had cleared and begun to install the foundation work for the new
396 chemical storage building which would house all of the main plant chemicals other than
397 hypochlorite, which was still in its existing building. He stated they also had begun to expand the
398 filter building for the new backwash pumps in order to begin the refurbishment of the main filter
399 building. He stated all the new plate settlers, which were going into two of the sanitation basins,
400 were stored there next to the existing GAC building. He stated things were getting ready to move
401 pretty swiftly over at that plant as well. He stated that they were now looking for this project to
402 be completed in March of 2023, and an overall budget of \$43 million.

403
404 Mr. Schiller reported that the next project was the wastewater flow equalization tank and pump
405 station upgrades in Crozet, which were to provide offline storage of wet weather local to the
406 Crozet area to avoid affecting downstream sewer capacity during wet weather events. He stated
407 they were building a one-million-gallon storage tank, as well some improvements to the existing
408 pump station. He referenced a picture of a pre-stressed structure, where they poured the tank wall
409 pieces locally and then tilted them up and stood them on top of the base, noting where they
410 began to line the tank with wire and pre-stress it and then cover the wire with gunite shotcrete.
411 He stated now they were in the process of putting on the last layer of gunite shotcrete on the side
412 of the tank and were getting ready to do a leakage test on that tank, then move into more
413 significant internal pump station improvements. He stated that project was moving along nicely,
414 and they were expecting to be completed no later than November of 2022 at a budget of \$5.4

415 million.

416
417 Mr. Schiller stated the lighting improvements at the Moores Creek plant were being done to
418 improve site lighting for safety purposes, as well as to meet Albemarle County lighting
419 requirements. He referenced an image of a shield that had been installed on some of the existing
420 wall packs with the intent of converting all of the external lighting to full cutoff—meaning that it
421 did not have any significant light pollution, directing the light down where it was needed instead
422 of out into the sky. He stated some wall packs were installing these shields and they were doing
423 some of the same for the streetlights. He continued with an image showing the installation of
424 some new concrete bases for new light posts. He stated this work was well underway and would
425 be completed by February 2022 in accordance with the County requirements, with a budget of
426 about \$600,000.

427
428 Mr. Schiller stated the Airport Road pump station and piping project was established to basically
429 be able to take urban pressures on water and send it into the Piney Mountain storage tank. He
430 stated it was also going to be part of the future airport pressure zone when that was developed.
431 He stated bids were opened at the beginning of this month, and went to the Board with a
432 recommendation of award in the consent agenda, which just passed. He stated this project would
433 be complete in December of 2023, with a budget of \$10 million.

434
435 Mr. Schiller stated the Moores Creek clarifiers and lime silo demolition project was at the
436 Moores Creek Plant and was to demolish the two in-plant clarifiers that were no longer in
437 operation. He stated that was being done to remove safety concerns with the open basins, as well
438 as to allow for future expansion. He stated space was premium at this plant, so if there was an
439 opportunity to create some, they would like to do so. He stated another goal of this project was to
440 remove an abandoned lime silo. He stated this project had just started, and they were in the
441 process of finalizing the schedule with the contractor and were working through some submittals
442 and material acquisition, which was more challenging these days than it had been in the past. He
443 stated they were looking for this project to be completed in May 2022 with a budget of \$790,000.

444
445 Mr. Schiller stated the Glenmore Water Resource Recovery Facility influent pump and Variable
446 Frequency Motor Drive addition was the next project and could be seen in an aerial image of the
447 treatment plant on the slide. He stated the pump station was adjacent to the main road, and the
448 new in-plant pump would be installed because there was an open slot for a third pump. He stated
449 they had to install a Variable Frequency Motor Drive, which would actually be installed in the
450 main plant. He stated there was some wiring to go back and forth between those two locations
451 and some other work, but largely will have those pumps installed and a new exhaust fan in the
452 low well at the pump station. He stated this project had been awarded, and the work will be
453 completed in July of 2022, with a budget of \$370,000.

454
455 Mr. Schiller stated he would go through some design projects that were just about to go to
456 construction as well as some other significant projects they wanted to include in the presentation.
457 He stated the Moores Creek 5KV Electrical System Upgrade was an upgrade of the original
458 electrical components of this plant when it was built in the 1980s. He stated it was to replace a
459 number of components that were at the end of their serviceable lives. He stated this included a
460 number of the motor control centers, some of the transformers and a new switchgear building.

461 He stated these were a lot of electrical components that represent a lot of challenges when it
462 came to maintaining plant operations amongst disconnecting this equipment and still trying to
463 maintain electrical service to the plant. He stated it had been a complicated design, but they were
464 looking to get this advertised next month with bid opening shortly after the new year. He stated
465 they were expecting the project to be completed in 2024, with a budget of \$5 million.

466
467 Mr. Schiller stated the South Rivanna River crossing and North Rivanna Transmission Main
468 project was to install a second South Rivanna River crossing for the main water conveyance line.
469 He stated the main line that currently existed was to the east of Rt. 29, and they were planning to
470 install a redundant line to the west. He stated as they could see on the slide, there were a number
471 of different location options, and they were trying to figure out which made the most sense from
472 not only an environmental and cultural impact standpoint but also from a project standpoint. He
473 stated they were at the point of trying to finalize what that alignment would be, and then they
474 could move into more significant design. He stated that this project, along with the Airport Road
475 Pump Station Project, are important components to provide a more reliable source of water to the
476 northern urban zone as well as the North Rivanna pressure zone. He stated they were looking for
477 this project to be completed by 2024, with a budget of \$6 million.

478
479 Mr. Schiller stated that the Birdwood to Old Garth water line project, was a portion of the main
480 transmission line for raw water transfer from the South Rivanna Reservoir to the Ragged
481 Mountain Reservoir. He stated there would be 1,000 feet of 36-inch pipe, and this was being
482 done to basically get ahead of private development that was planned to avoid additional costs
483 that could occur should they do it after that development took place. He stated that they were at a
484 60% design of this project, and they had been discussing the work with VDOT and the railroad
485 folks. He stated this design was progressing nicely and they were trying to do it in concert with a
486 few remaining easements that were being finalized on the north side of the project. He stated they
487 were looking for this project to be completed in 2024, with a budget of \$2 million.

488
489 Mr. Schiller stated that next was the Beaver Creek Dam, pump station and piping modifications
490 project. He stated it was essentially to upgrade to the spillway, so it would meet DCR dam safety
491 standards. He stated as part of that project, they would be replacing the existing raw water pump
492 station, intake, and the raw water pipeline to the Crozet Water Treatment Plant. He stated they
493 recently had a public meeting in which they discussed the project and some of the spillway
494 alternatives. He stated they also had worked with several alternatives to determine where the best
495 location for the future pump station site would be and they brought that to the Board recently,
496 with the focus being on pump station site number one. He stated that they continued to work
497 through that design as well as the NRCS funding process and the design components that they
498 required as they looked to get this project completed by 2026 with an overall budget of about
499 \$31 million.

500
501 Mr. Schiller stated they were working on the Ragged Mountain Reservoir to Observatory Water
502 Treatment Plant pump station and water line project. He stated this was one of the legs of the
503 main raw water conveyance project. He stated this one was of importance because it improved
504 the raw water conveyance from Ragged Mountain to the Observatory Water Treatment Plant. He
505 stated they were currently upgrading Observatory to 10 MGD, so they were looking to create a
506 more reliable raw water source to the treatment plant. He stated that right now, they were

507 working through some preliminary design components as they finalized some remaining
508 easements. He stated they would be replacing some outdated infrastructure and making the raw
509 water supply of the treatment plant much more reliable. He stated completion was estimated for
510 2027, with an overall budget of \$30 million.

511
512 Mr. Schiller stated that the last significant project is the central water line project, which will
513 improve water flow pressure and redundancy in the urban system and better hydraulically
514 connect the Observatory Water Treatment Plant to the central and eastern portions of the City. He
515 stated they were at the beginning design of this project and were looking at some of the
516 connection points. He stated it was about five miles of 24-inch and 30-inch water main they were
517 looking to install in this area. He stated they were expecting to be completed by 2027 with an
518 overall budget of \$31 million.

519
520 Mr. Schiller stated he knew he had to go through all of the slides quickly. He stated if they had
521 any questions or interest in specifics to please let him know.

522
523 Mr. O'Connell thanked Mr. Schiller and stated that was a really good tour of all of the projects.
524 He stated it was hard to see all of it other than the way he just did it.

525
526 Mr. Schiller stated it was a 30-minute presentation done in 10.

527
528 Dr. Palmer stated she agreed. She thanked Mr. Schiller and stated she had some questions after
529 reading the packet, but it was cleared up when listening to him go through it.

530
531 Mr. Gaffney asked if there were any other comments or questions from staff. Hearing none, they
532 would move onto remote camera capabilities.

533
534 *d. Remote Camera Capabilities; Lonnie Wood*

535 Mr. Wood reported that a couple of years ago, they started replacing most of their closed-circuit
536 TVs. He stated closed-circuit TVs were an older technology that had a DVR and ran off an
537 internal network. He stated video can take up a lot of bandwidth in a network. He stated they
538 moved to a web-based system that used the browser as a viewer, and it was much more efficient
539 for the network. He stated they had quite a few cameras now. He stated displayed were all of their
540 livestream. He showed Sugar Hollow on the screen. He stated it had many capabilities such as
541 archiving and motion search. He stated the motion search works by selecting an area for the
542 motion search and it would pick up anything that was deemed to be motion. He stated there was
543 something from last week when they were siphoning off the Sugar Hollow reservoir, and the
544 camera picked them up testing some things out there and pulling the siphons off. He stated all of
545 their sites were displayed, such as Moores Creek and all of the wastewater treatment plants, all of
546 the water treatment plants (except Red Hill) and all of the reservoirs (except Totier Creek), and
547 Ivy MUC. He stated they were going to test out Ivy customer vehicles so receipts did not have to
548 be handed out of the window, and instead there would be a screen capture of a driver and a
549 timestamp on the ticket, give them their ticket, and that would be the receipt they had online. He
550 showed the South Rivanna dam. He stated it had days and days of storage, from 30 days to 160.
551 He stated they also could take screenshots for archives. He stated there was an archive someone

552 took when work was being done on the dam back in June. He stated he wanted to show one from
553 the other night. He stated there was a bear that visited the South Rivanna plant in the middle of
554 the night. He stated where it started off, they could not figure out what it was, but then the bear
555 came out. He stated the bear was inside the gate and he did not know how he got inside the gate,
556 but it was just looking around.

557
558 Mr. Gaffney asked if the bear got out of the gate too.

559
560 Mr. Wood stated it evidently did. He stated that was just a brief show of what the camera system
561 could do. He stated it was very efficient for their network and they could give people access to it
562 and they could check it out as they needed to.

563
564 Mr. O'Connell asked if it was tied to intruder alarms, or if that was a separate system.

565
566 Mr. O'Connell stated that would be the access control system, so it would be separate.

567
568 Mr. Gaffney asked if anyone was monitoring these on a regular basis.

569
570 Mr. Wood stated the operators did monitor it. He stated they would monitor this when they were
571 here, because they have to figure out when to switch out the trucks when they get full. He stated
572 there was an operational use for some of them, but there was no one watching the video 24/7. He
573 stated that a lot of it was going to be forensic, so if there was an incident they could go back and
574 look at it. He stated for example, when they were getting close to a drought situation, they would
575 monitor to see when a reservoir stops flowing, because that was an indicator for when they
576 would have to start the time clock on the minimal release requirements, so it was showing real-
577 time overflow of the dam. He stated it was safe sending an operator to put their eyes on it once or
578 twice a day to see when it stopped overflowing.

579
580 Dr. Palmer stated that maybe it was not efficient enough to warrant it, but with respect to
581 swimming at Sugar Hollow in the reservoir and rope swings, had they considered at all pointing
582 these cameras at the reservoir.

583
584 Mr. Wood stated they had two in Sugar Hollow. He stated they sat right next to the data line. He
585 stated one was pointed downstream, but they could not get a good view of it. He stated that going
586 anywhere further downstream would not be possible because the data line was not always
587 accessible that way. He stated they would have to be put at almost every 50- or 100-foot intervals
588 to get the coverage needed.

589
590 Dr. Palmer thanked Mr. Wood.

591
592 Mr. Wood stated the cameras could zoom in, but in the summertime when people were
593 swimming, it would not get the coverage needed. He stated the other camera had a good view,
594 but it was not panning around.

595
596 Mr. Gaffney stated hopefully no one was swimming that close to the dam.

597

598 Mr. Wood stated hopefully, yes.

599
600 Mr. Gaffney stated it was pretty neat.

601
602 Dr. Palmer agreed it was.

603
604 Mr. Wood stated the IT Department came up with it a few years ago and he was thankful for their
605 effort for this. He stated operations staff like to keep adding more and more cameras.

606
607 Mr. Gaffney asked if there were any other comments or questions for Mr. Wood.

608
609 Mr. O'Connell thanked Mr. Wood for showing that. He stated he knew they had some of that but
610 not all of it.

611
612 **10. OTHER ITEMS FROM BOARD/STAFF NOT ON AGENDA**

613 There were no other items presented.

614
615 **11. CLOSED MEETING**

616 There was no reason for a closed meeting.

617
618 **12. ADJOURNMENT**

619 **At 3:11 p.m., Dr. Palmer moved to adjourn the meeting of the Rivanna Water and Sewer**
620 **Authority. Mr. O'Connell seconded the motion, which passed unanimously (6-0).**

621
622
623 Respectfully Submitted,

624
625
626
627
628


Mr. Lonnie Wood
Assistant Secretary - Treasurer

