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RWSA BOARD OF DIRECTORS
Minutes of Regular Meeting
February 23, 2016

A regular meeting of the Rivanna Water & Sewer Authority (RWSA) Board of Directors was held on Tuesday, February 23, 2016 at 2:15 p.m. in the 2nd floor conference room, Administration Building, 695 Moores Creek Lane, Charlottesville, Virginia.

Board Members Present: Mr. Tom Foley, Mr. Mike Gaffney, Ms. Kathy Galvin, Mr. Maurice Jones, Ms. Judith Mueller, Mr. Gary O’Connell and Dr. Liz Palmer.

Board Members Absent: None.

Staff Present: Mr. Tim Castillo, Ms. Victoria Fort, Mr. Tom Frederick, Mr. Rich Gullick, Ms. Teri Kent, Mr. Doug March, Mr. Scott Schiller, Ms. Andrea Terry, Ms. Jennifer Whitaker and Mr. Lonnie Wood.

Also Present: Mr. Kurt Krueger – RWSA Counsel, members of the public and media representatives.

1.0 Call to Order

The regular meeting of the RWSA Board of Directors was called to order by Mr. Gaffney on Tuesday, February 23, 2016 at 2:38 p.m., and he noted that a quorum was present.

2.0 Minutes of Previous Board Meeting

a. Minutes of the Regular Meeting of the Board on January 26, 2016

Dr. Palmer noted that she had asked some questions of Ms. Kent, who responded by email, and said that everything had been addressed to her satisfaction.

Mr. Frederick suggested that for the benefit of the rest of the Board, it would be helpful to clarify what the changes were.

Ms. Kent stated that on page 5 in the middle of the page, a correction was made to Dr. Palmer’s statement regarding unexpected projects arising over the last several years to change the language from “might not happen” to “might or might not happen.”

Dr. Palmer pointed out that she was trying to say that there may be many unexpected projects in the future, so RWSA may not be “front-loading” the CIP.

Ms. Kent stated that the second change was on page 6, correcting “Homelands Road” to “Lamb Road.”

Mr. O’Connell moved to approve the minutes with incorporation of the changes Ms. Kent had read. Mr. Jones seconded the motion, which passed 6-0. Ms. Mueller abstained as she was not in attendance at the January 26 meeting.

3.0 Recognition

a) Resolution of Appreciation to John W. Howell, Jr.

Mr. Gaffney read the following resolution into the record:

RIVANNA WATER AND SEWER AUTHORITY BOARD OF DIRECTORS

Resolution of Appreciation for John W. Howell, Jr.

WHEREAS, Mr. Howell has served in a number of positions since 1989; and

WHEREAS, Mr. Howell served over twenty-seven years in various positions in the Maintenance and Wastewater Departments; and

WHEREAS, over the same period Mr. Howell has been a valuable resource to the Authority, its customers, and its employees; and

WHEREAS, Mr. Howell's understanding of the Authority's overall operation has positively impacted the Authority, its customers, and its employees; and

WHEREAS, the Rivanna Water & Sewer Authority Board of Directors is most grateful for the professional and personal contributions Mr. Howell has provided to the Rivanna Water & Sewer Authority, its customers and its employees; and

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

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

Dr. Palmer moved to adopt the resolution as read. Ms. Galvin seconded the motion, which passed unanimously (7-0).

Mr. Tim Castillo, RWSA Wastewater Manager, received the award on behalf of Mr. Howell, who was not present at the meeting.

b) Merit Award – Virginia Chapter of American Council of Engineering Companies

Mr. Frederick reported that for the second consecutive year, the RWSA had won a merit award from the Virginia Chapter of American Council of Engineering Companies for engineering excellence. This year the award was associated with the Meadow Creek Interceptor replacement, which was recognized at an event at the Jefferson Hotel in Richmond. He stated that the award was given to the RWSA along with Greeley and Hansen for the project, which was designed in 2008-2009 and constructed between 2010 and 2012, replacing a 50-year-old pipeline with a larger pipeline using leapfrog technology to maintain sewer flow during construction. Mr. Frederick noted that the work included construction in a sensitive park area, as well as located behind some residential properties, with much of the pipeline placed along the same alignment as the old pipe. He stated that the construction also included areas where there were wetlands, and this constricted where the new pipeline could be located. Mr. Frederick mentioned that there had been extensive public outreach during that period of time, with many meetings held with residents of Greenbrier Park, Locust Meadows, and several other neighborhoods. He noted that the public input had resulted in some changes to design. Mr. Frederick stated that he was proud of the fact that there had not been an incident of sanitary sewer overflow in the four years since the full length of the new pipe was placed into service, whereas prior to that there would be overflows in the old pipe whenever there was rainfall of approximately one inch or more. He mentioned that Ms. Michelle Simpson, who was not present at the meeting, had served as the project manager on the Meadow Creek Interceptor replacement, and recognized Ms. Jennifer Whitaker for her role as the RWSA Chief Engineer.

Mr. Frederick reported that the City of Charlottesville and RKK Engineering had also received an award from the Virginia Chapter of American Council of Engineering Companies, which had been presented at the same event in Richmond, for the Route 250 interchange.

4.0 Executive Director's Report

Initial Fill at Ragged Mountain Reservoir

Mr. Frederick reported that on February 11, the new Ragged Mountain Reservoir completed its initial fill, and the news media had been very positive in their coverage – which included radio, TV and newspaper. He stated that since completion of the Ragged Mountain fill, the RWSA had dialed back the transfer of water from Sugar Hollow, and while he would like to shut it off completely the RWSA could not achieve that goal during the winter months. He explained that the 1927 pipeline was shallow buried in many locations, which could cause the water in the pipe to freeze and burst the pipe if water in the pipeline stood still. He added that the latest estimate of flow he had seen was about 2 MGD, which was about half the rate as when they were filling

the Ragged Mountain Reservoir, and the RWSA would adjust further as needed once the threat of occasional freezing temperatures had passed.

Mr. Frederick reported that the RWSA was increasing the production at the Observatory plant, and one of the later figures he had seen showed about 2.5 MGD – but there were some constraints on the distribution system, and the Board could review that with staff when they got to the five-year capital improvement planning part of the agenda.

Water Plant Metering

Mr. Frederick stated that despite manufacturer claims about improved meter technology, his experience has been that new meter installations often have glitches. He then explained that the RWSA had replaced the three meters at the three urban water plants with new technology meters in an effort to improve accuracy of flow leaving the water plants. He stated that almost immediately after the new meters were installed, staff noticed a trend suggesting that urban water demand was decreasing, but this occurred in late September when seasonal demand typically dropped. Mr. Frederick stated that when it was clear the trend was distinct from other years, the RWSA hired a third party independent tester who determined that the new Observatory and North Fork meters were accurate, but found that the South Fork meter – where most of the urban water was treated – was registering 9% too low on average. He noted that this meant that the daily demand data provided to the Board since late September up until about two weeks ago was 7-9% low. Mr. Frederick stated that staff would be adjusting historical numbers so that graphs presented in the future would adjust in the calibration, adding that there were acceptable standards in the industry for retroactive adjustment once it was determined that a meter needed to be adjusted. Mr. Frederick stated that although the staff would “look back” in terms of correcting historical data, because RWSA revenues were within 2% of budget for the current year-to-date, staff would not “look back” in terms of billing and would not adjust the bills sent to the City and the ACSA. He apologized for the error, but said that staff was smart to recognize the issue and take steps leading to correction.

Mr. O’Connell asked if staff was going back past September for adjustment, because the term “historical” to him seemed to indicate years.

Mr. Frederick responded that staff would only adjust between the date the new meter at South Fork was installed and the date it was correctly calibrated, and stated that with the South Fork meter adjustment, the data from the new meters was not that much different than what was being registered before with the old meters. He added that this similarity may actually validate that the data prior to September 2015 was good data.

Meeting with County – Development Along Potential South Fork to Ragged Mountain Water Line Corridors

Mr. Frederick reported that at Dr. Palmer’s request, RWSA staff had met with Mark Graham in late January to look at the potential for development along possible corridors for the future South Fork to Ragged Mountain water line. He stated that Mr. Graham advised there was very limited

development along most of the potential alternatives because many of the possible options were outside of the jurisdictional or development area. Mr. Frederick stated further that Mr. Graham had validated Dr. Palmer's suggestion to the RWSA Board in January that there was a County process to reserve an alignment once it was determined – but studies first had to be undertaken to identify the preferred alignment, and Albemarle County would have to hold a public hearing before placing the preferred corridor on a map. He added that the RWSA would need to perform its proposed corridor studies and solicit public comments before going to Albemarle County. Mr. Frederick stated that it was nice to have this as an option in the toolbox, but it was not something they would be able to use immediately.

Mr. O'Connell asked if the RWSA would look at a change in the operating practice for Sugar Hollow/Ragged Mountain in the summer when the reservoir levels dropped, since the reservoir was now full and hopefully there would be a wet spring.

Mr. Frederick responded that for as long as weather conditions allowed them to keep both Ragged Mountain and Sugar Hollow full, which was where things stood currently, then the current protocol would continue. He stated that at some point in the spring when both reservoirs could no longer be kept full, there would be priority given for Sugar Hollow to be kept full by allowing Ragged Mountain to start drawing down. Mr. Frederick stated that the RWSA would not allow Ragged Mountain to get below nine feet or invoke a trigger that would allow them to dial back the release to the Moorman's River. He explained that somewhere before a nine-foot level was reached, the RWSA would reverse the process and start drawing down Sugar Hollow – then in the fall and winter, the plan would be to use Sugar Hollow to refill Ragged Mountain. Mr. Frederick noted that this should put them in a situation where Sugar Hollow should not fall as far as it did in 2015, but it would depend on weather conditions and all he could do was provide a general conceptual plan at this point.

Mr. O'Connell suggested that perhaps Mr. Frederick could provide an update in his Executive Director's Report every few months if he saw a change occurring, although it may be evident from the weather, and commented that it would be a balancing act.

Press Release – Ragged Mountain Initial Fill

Mr. Frederick stated that he wanted to mention something that had come to his attention the previous week from a Board member, and explained that there may have been some misunderstanding regarding a press release indicating that the Ragged Mountain Reservoir was full. Mr. Frederick noted that the RWSA staff had planned the release to be issued the day the initial fill was completed believing the news media desired to report this story in real time, and this milestone was not intended to be an advanced planned public event. Mr. Frederick stated that the misconception of a planned public event had reminded RWSA staff that there was an interest in a larger public event for Ragged Mountain, and while a date had not been set yet, it would be nice to have it coincide with the opening of the new trails – but that would depend on the City Council process. He stated that Rivanna staff had considered for such a future event a dedication plaque, and had also talked about trail markers to provide the history of the site, such as a marker that might read: "At this location in 1886, the original Charlottesville reservoir dam was built." Mr. Frederick added that if it worked to have some markers that brought some

historical context to what was within the view along the trails, staff was generating some ideas on content.

Mr. Frederick reported that the purchase order for the floating bridge was issued in January so that it could be installed at any point, but the conditions had been so wet that the installer continued to ask for delay until drier weather prevailed.

Mr. O'Connell asked if the trail connections were complete enough up to the floating bridge location, as he was asked that question frequently.

Mr. Frederick confirmed that they were not complete, but the bridge was proposed to be installed anyway.

Dr. Palmer stated that if the bridge were installed, hikers would probably walk to the bridge without the trails.

Mr. Gaffney commented that he had hiked to where the trail ended, but knew where the bridge would be installed and he wanted to see the abutment, so he walked along the reservoir shore until he found the abutment for the bridge. He added that it would be nice to have a trail just to the bridge.

Ms. Galvin stated that if the bridge went in without a trail, people would be making their own trail – which was not good.

Mr. Frederick stated that whether the RWSA was going to allow the bridge to be opened or barricade it off-limits would be an issue coordinated with the City.

Ms. Galvin noted that it would be very interesting to have historical markers that reflected the industrial history, and noted that a coal tower was being retained in a residential development on Water Street Extended, so perhaps RWSA could talk with Chris Gensic about the idea.

Ms. Kent stated that she and Mr. Gensic were discussing possibilities.

Mr. Gaffney stated that someone had asked him about what else could be located at Ragged Mountain, and he mentioned Mr. O'Connell's idea about having an educational center that would allow visits from school groups.

Mr. O'Connell mentioned that years ago when the reservoir was proposed for expansion, there was a concept to place a physical structure similar to what was available at Ivy Creek that would host school groups, adding that Ragged Mountain was a beautiful location.

Dr. Palmer stated that she agreed with Ms. Galvin's concerns about the danger of placing the bridge without the trails, judging by what she had observed as the heavy use of that area over the years.

Mr. Frederick asked the Board if they were asking to delay the bridge installation.

Mr. O’Connell asked if there would be an issue with the contractor.

Mr. Frederick explained that a delay would need to be discussed with the contractor, who had been given authorization to proceed after prior coordination with the City. He explained that the contractor had proposed to transport the bridge by boat to its permanent location, anchor to the abutments along each shore, but the shoreline was currently too wet and the contractor did not consider it safe.

Dr. Palmer suggested that RWSA staff discuss further with City parks and Chris Gensic.

Mr. March stated that the boat ramp area was very wet and soggy, and that was where the contractor would be putting the pieces together when he floated the bridge – so it was just too soft currently.

Mr. O’Connell asked if there was any contract issue with delaying the installation.

Mr. March responded that he would have to ask the contractor, as the spring season was busier for him and the late winter/early spring window had been a good fit.

Ms. Galvin agreed that delay was a good idea.

Mr. Gaffney asked if there was a timetable on the trail just to the bridge.

Mr. Jones responded that it was slated for late spring.

Mr. O’Connell asked if there was a volunteer group that would assist in building the trails.

Mr. Jones explained that he would need to discuss that matter with Chris Gensic.

Mr. Gaffney noted that there was only about a quarter-mile missing to extend the trail to the bridge area.

Ms. Galvin suggested that the RWSA Board revisit the issue in March.

5.0 Items from the Public

Mr. Gaffney invited comments from the public.

There were none offered, and the Chair closed the public comment portion of the meeting.

6.0 Responses to Public Comments

There were no responses to public comments from the January meeting.

7.0 Consent Agenda

Mr. Gaffney asked if there were any items that Board members wanted to pull for comments or questions from the Consent Agenda.

- a) Staff Report on Finance – January 2016*
- b) Staff Report on Operations*
- c) Staff Report on Ongoing Projects*
- d) Contract Award and Construction Management Services – Crozet Ground Storage, Crozet Waterball & Stillhouse Tank Improvements*
- e) North Fork Rivanna River – Water Main Repair – Additional Construction Inspection Services*

Mr. O’Connell noted that there had been a number of bids for the Crozet water tank work, and asked for staff comment as to why there had been a lack of sound bids the first time the project was bid.

Ms. Victoria Fort, project manager, explained that when the RWSA had first bid the project, it was over the Thanksgiving holiday and many contractors who had showed interested in the project indicated after limited bids were received that they had not had time to prepare and submit bids based on the holiday and bid period. She stated that the RWSA had received enough feedback from contractors who were still interested in the work, so staff made some minor adjustments to the bid documents and rebid, receiving five favorable bids the second time.

Mr. Foley moved to approve the Consent Agenda as presented. Mr. Jones seconded the motion, which passed by a 7-0 vote.

8.0 Other Business

- a) Adoption of 5-Year Capital Improvement Program for FY 2016-20*

Mr. Frederick stated that the report he had provided to the Board was a quick summary of the document given to them in January, which Ms. Whitaker had reviewed with them, and he felt that the most important thing was to focus on Board members’ questions. He stated that regarding the second paragraph, RWSA staff was in the middle of development of the operating budget to be introduced to the Board in March and was reminded that in the request was a major expense to place the initial granular activated carbon in the tanks that will be constructed by early 2017, which was initially being proposed as an operating expense. Mr. Frederick stated that communications among staff members led them to recognize that the initial fill of carbon could be a capitalized expense as part of the equipment – and did not have to be part of operating expenses. He stated that to pursue the initial carbon as an operating expense would result in significant water rate increases for a one-time issue, and the Board had previously requested staff amortize capital expenses when appropriate, so staff was now proposing a change to the CIP document submitted in January to purchase the initial carbon in the capital budget, to include \$625,000 for the urban plants, \$60,000 for Crozet, and \$16,000 for Scottsville within the GAC projects. He stated that this was the one change in the capital budget since the Board had last

seen it, and reiterated that this would help the RWSA considerably in graduating the water rate increases that were associated with the use of carbon.

Mr. Frederick reported that the other item specifically addressed in his report was whether the South Fork Ragged Mountain water line should be in the budget to begin in 2017 or 2018. He reconfirmed that there was a commitment to build this water line, but this timing decision came down to a focus on internal priorities and limitation of staff and financial resources. Mr. Frederick stated that there were needs at the Observatory Water Treatment Plant, and he felt that it was time to begin negotiations for the lease for the plant with the University of Virginia (UVA), and the RWSA would also welcome simultaneously having the City of Charlottesville at the table to renegotiate the wholesale rates that the City charged UVA. He noted that barring any objections, he would ask Mr. Krueger to call Mr. Brown to start those discussions.

Mr. Frederick stated that there had been conversations with several Board members about having a discussion about the UVA lease and wholesale rates at an upcoming meeting of the Planning and Coordinating Committee (PACC) – on which Mr. Foley and Mr. Jones served. Mr. Frederick stated that perhaps it could be as an agenda topic at one of the next few meetings to emphasize the importance of this project on the community as a whole, with the University being a big part of the local community and this was very important to them as well.

Dr. Palmer stated that she had suggested having Mr. Frederick or Ms. Whitaker speak to the PACC.

Dr. Palmer indicated that she had met with Mr. Frederick about the Sugar Hollow pipeline, and he explained to her and convinced her of the wisdom of “waiting a bit”.

Mr. O’Connell noted that the water line right-of-way study was “slated” for 2018.

Dr. Palmer acknowledged the date, but added further that the project had originally been scheduled for 2011, so she hoped there were no other big projects “out of the blue” that would bump ahead of it. Mr. Frederick acknowledged the schedule changes, but also noted that the Ragged Mountain Dam was originally scheduled to be completed before 2011 and the Observatory Plant overhaul had always been a higher priority than the water line, and also has been delayed. He further acknowledged that issues with public support for the dam project had been among reasons for the multiple schedule delays.

Ms. Galvin asked if the RWSA Board was planning to have a CIP strategic planning session, as they had done it once before.

Mr. Gaffney responded that they were talking about having a strategic plan session, but not specifically one for the CIP.

Mr. O’Connell noted that it was not specifically for the CIP.

Ms. Galvin and Mr. Jones stated that it would entail a discussion of the CIP.

Ms. Galvin asked if this was planned for the next few months.

Mr. Frederick stated that RWSA staff was in the process of reaching out to prospective facilitators as well as engaging to Board members in discussions about what they wanted to accomplish with the strategic plan. He emphasized that some of those discussions may pertain to what was appropriate for discussion at the Board level and what was appropriate to be undertaken at the staff level, and he hoped to get back to Board members in the next few weeks.

Mr. O'Connell turned to discussion by the ACSA Board regarding the proposed CIP for RWSA. He noted that one of the ACSA Board members saw the condition assessment for the Ragged Mountain to Observatory water lines and asked that he raise the issue of adding a condition assessment on the Sugar Hollow pipeline to the RWSA CIP. Mr. O'Connell stated that he felt the extent of that question being raised was if the "smart ball" technology be used that could identify need for major repairs before causing an emergency failure. He explained that upon his further inquiry with ACSA Board members, their desire seems to be for RWSA to research this issue for consideration over the next year. Mr. O'Connell acknowledged the condition assessment in the present CIP was not scheduled for implementation until 2020, so if such research confirmed the need to add Sugar Hollow by next year the condition assessment work could still be performed at one time.

Dr. Palmer asked if ACSA's reason for this assessment was to identify any terrible situations that might occur in the next few years until the new water line was built, and not to extend the lifespan of the existing Sugar Hollow pipeline

Mr. Gaffney stated that certain members of the ACSA Board may have thought it was one reason, and others may have thought it was another.

Mr. O'Connell clarified that the rationale, as reflected in the email he forwarded to the RWSA Board, was proposing a survey to ensure there was not an emergency situation with the Sugar Hollow waterline requiring expensive major repairs. He stated that the intent was to do some examination and identify some more minor repairs that could become a bigger issue and cause an emergency in the future – but how far into the future, he did not know.

Ms. Galvin added that the assessment would need to include what the likelihood of a future emergency was.

Ms. Palmer agreed that this would be a concern for her as well.

Mr. Frederick stated that the RWSA Board did not necessarily need to hear more about what staff did, but perhaps to help them in understanding this it was important for him to mention that there were a lot of tough decisions that went into capital planning – and in the ideal world, a condition assessment would be done on every pipe in the system, as more information was better. He stated that one of the things the RWSA staff did for capital planning was a top-down analysis that indicated what they could do and what they could afford from a financial standpoint. Mr. Frederick explained that the initial target that he had envisioned when starting the capital plan was to take the total value of the capital plan from last year and reduce it by 5-

10% as a macro goal. He commented that this reflected that Rivanna's debt service – even despite the refinancing done by Mr. Wood – was currently higher than many utilities of comparable size. Mr. Frederick stated that the reasons why were evident in what was now a world-class waste system, which had previously been terrible, so it was all money well spent. He emphasized that capital planning was a 360 process, not a linear one, and from a financial standpoint Rivanna was trying to knock down the debt service ratio. Mr. Frederick noted that he was unable to meet the 5-10% goal but ended up at a 3% reduction, and the five-year plan was in the \$130 million range – down from around \$201 million at the peak four years ago.

Mr. Frederick stated that the RWSA had talked about condition assessments of other pipes including Sugar Hollow, but Sugar Hollow did not make the cut and only one pipe was put in for the next few years, as mentioned in his report. He stated that the rationale for its inclusion was that staff felt it was a key pipe to study as part of the 2018 evaluation of the Ragged Mountain-South Fork pipeline, because no matter where it ended up going it was important to have a conduit between Ragged Mountain and Observatory. Mr. Frederick said that one of the pieces of data that could be helpful was to find out how much life the Observatory pipeline had left in it, because if it was enough that its replacement could be deferred, that would help with future capital planning needs. Mr. Frederick stated that Rivanna staff did not consider the Sugar Hollow pipeline assessment as critical for several reasons, including that the community has said that it would be taken offline within the next several years, so padding information on its condition was not perceived as being as urgent. He noted that the other reason was the fact that there was now a large “bathtub” of water in Ragged Mountain, and even if Sugar Hollow was shut down for repair for 3-6 months, they would not run out of water. Mr. Frederick emphasized that in looking at the finished water system, staff felt there were pipes that were more critical to evaluate than Sugar Hollow – such as the western leg of the southern loop that took water from Observatory and filled the Avon Street tank. He stated that this was a critical connection, and if something happened to that pipe, there would be an immediate emergency to get it repaired and people would be completely out of water. Mr. Frederick reported that another critical pipe ran along US 29 North from Timberwood Boulevard almost to the Greene County line, which had experienced a break previously and caused a loss in water pressure before there was a response.

Mr. Frederick stated that he appreciated the comments received from the ACSA and the fact that their Board recognized that there should be more information about critical pipes – an objective on which the RWSA agreed.

Mr. O'Connell clarified that the ACSA Board would like more information on the technology, which could expand to the other pipes since the technology was the same, and the cost information for Sugar Hollow, as there were questions about who would pay for it. He stated that otherwise, the ACSA Board was supportive of the CIP.

Mr. O'Connell moved to approve the proposed capital improvements projects with the amendments reflected in the Board packet involving granular-activated carbon. Dr. Palmer seconded the motion, which passed unanimously (7-0).

9.0 Other Items from Board/Staff not on Agenda

There were none presented.

10.0 Closed Meeting

There was no closed meeting held.

11.0 Adjournment

Mr. Foley moved to adjourn the RWSA Board meeting. Dr. Palmer seconded the motion, which was approved by a vote of 7-0.

There being no further business, the meeting adjourned at 3:23 p.m.