



Rivanna Solid Waste Authority

Board of Directors Regular Meeting

August 28, 2018
2:00pm



RIVANNA SOLID WASTE AUTHORITY

695 Moores Creek Lane • Charlottesville, Virginia 22902 • (434) 977-2970

BOARD OF DIRECTORS

Regular Meeting of the Board of Directors of Rivanna Solid Waste Authority

DATE: August 28, 2018

LOCATION: Conference Room, Administration Building
695 Moores Creek Lane, Charlottesville, VA

TIME: 2:00 p.m.

AGENDA

1. CALL TO ORDER

- a. Welcome to new Board member, Mike Murphy, Interim City Manager*
- b. Nominations and Election of Board Secretary*

2. MINUTES OF PREVIOUS BOARD MEETING

- a. Minutes of the Regular Meeting of the Board on June 26, 2018*

3. RECOGNITION

- a. Resolution of Appreciation for Maurice Jones*
- b. Resolution of Appreciation for Mark Brownlee*
- c. Resolution of Appreciation for Kenneth Chapman*

4. EXECUTIVE DIRECTOR'S REPORT

5. ITEMS FROM THE PUBLIC

6. RESPONSES TO PUBLIC COMMENTS

7. CONSENT AGENDA

- a. Staff Report on Finance*
- b. Staff Report on Ivy Material Utilization Center/Recycling Operations Update*
- c. Staff Report on Ivy Landfill Environmental Status*
- d. Staff Report on Ongoing Projects*

8. OTHER BUSINESS

- a. Presentation of Ivy MUC Master Plan – Convenience Center Layout Alternatives; Phil McKalips, Director of Solid Waste*

(RECESS THE RSWA MEETING TO BEGIN THE RWSA MEETING; MOTION REQUIRED)

b. Presentation of Quarterly Strategic Plan Update; Katie McIlwee, Executive Coordinator and Communications Manager

c. Presentation of FY 2020 – 2025 Six-Year Staffing Plan; Lonnie Wood, Director of Administration & Finance

9. OTHER ITEMS FROM BOARD/STAFF NOT ON AGENDA

10. CLOSED MEETING

11. ADJOURNMENT

GUIDELINES FOR PUBLIC COMMENT AT RIVANNA BOARD OF DIRECTORS MEETINGS

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

Members of the public requesting to speak will be recognized during the specific time designated on the meeting agenda for "Items From The Public." Each person will be allowed to speak for up to three minutes. When two or more individuals are present from the same group, it is recommended that the group designate a spokesperson to present its comments to the Board and the designated speaker can ask other members of the group to be recognized by raising their hand or standing. Each spokesperson for a group will be allowed to speak for up to five minutes.

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

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

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

The agendas of Board meetings, and supporting materials, are available from the RWSA Administration Office upon request or can be viewed on the Rivanna website(s)



RIVANNA SOLID WASTE AUTHORITY

695 Moores Creek Lane • Charlottesville, Virginia 22902 • (434) 977-2970

RSWA BOARD OF DIRECTORS Minutes of Regular Meeting June 26, 2018

A regular meeting of the Rivanna Solid Waste Authority (RSWA) Board of Directors was held on Tuesday, June 26, 2018 at 2:00 p.m. in the 2nd floor conference room, Administration Building, 695 Moores Creek Lane, Charlottesville, Virginia.

Board Members Present: Mr. Mike Gaffney – presiding, Ms. Kathy Galvin, Mr. Trevor Henry, Mr. Maurice Jones, Mr. Paul Oberdorfer, Dr. Liz Palmer and Mr. Jeff Richardson.

Board Members Absent: None.

Ms. Galvin arrived at 2:09 p.m. Mr. Gaffney left the meeting at 4:15 p.m.

Staff Present: Mr. Mark Brownlee, Mr. Tim Castillo, Mr. Kenny Lawhorne, Mr. Bill Mawyer, Ms. Katie McIlwee, Mr. Philip McKalips, Mr. Bill Morris, Ms. Teresa Napier, Ms. Betsy Nemeth, Mr. David Rhodes, Ms. Michelle Simpson, Ms. Andrea Terry, Mr. David Tungate, Ms. Jennifer Whitaker, and Mr. Lonnie Wood.

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

1. CALL TO ORDER

Mr. Gaffney called the meeting to order at 2:03 p.m.

2. MINUTES OF PREVIOUS BOARD MEETING

a. Minutes of the Regular Meeting of the Board of May 22, 2018

There were no changes to the minutes.

Dr. Palmer moved to approve the minutes of the RSWA May 22, 2018 meeting as presented. Mr. Henry seconded the motion, which passed 5-0-1. Mr. Jones abstained from the vote as he was not present at the May 22, 2018 meeting. Ms. Galvin had not yet arrived and was absent from the vote.

3. RECOGNITION

Mr. Mawyer reported that Philip McKalips had been selected as the new Director of Solid Waste, having served for three years as Rivanna's safety and environmental manager.

4. EXECUTIVE DIRECTOR'S REPORT

Mr. Mawyer reported that Rivanna was making good progress on the transfer and recycling station and was hopeful for an August or September opening. He reported that the electronic waste recycling day had been advertised on June 24, with instructions for the public to make reservations with Rivanna beginning June 25; as of noon on June 26, there were 178 reservations of the 350 available slots.

Mr. Mawyer noted that at the County's request, Rivanna had participated in accepting storm-related debris at the landfill and taken in about 76 tons of vegetative debris from 181 customers, who disposed of an average of 840 pounds each.

5. ITEMS FROM THE PUBLIC

Mr. Gaffney invited items from the public.

There being none offered, the agenda item was closed.

6. RESPONSES TO PUBLIC COMMENTS

There were no responses to public comments for this month.

7. CONSENT AGENDA

a. Staff Report on Finance

b. Staff Report on Ivy Material Utilization

c. Staff Report on Ivy Landfill Environmental

d. Staff Report on Ongoing Projects

Mr. Jones moved to adopt the resolution as presented. Dr. Palmer seconded the motion, which passed unanimously (7-0).

8. OTHER BUSINESS

a. Presentation: Recycling at the McIntire Recycling Center

Mr. McKalips reported that at the February board meeting, the RSWA Board had authorized staff to enter into a contract with Arcadis to develop a master plan for the Ivy MUC, and part of that plan would include looking at recyclables and making recommendations as to what could be recycled and how it might be done differently. He stated that to help inform this approach, staff felt it was helpful to consider what was happening at McIntire today.

Mr. McKalips stated that there had been a lot of interest in this locally, stating that China has been a big player in recycling in the U.S. – having received about a third of America’s recycling each year. He noted that this had been decreasing, and China had set up legislation in 2013 to reduce the receipt of recycling under “Greenfence,” which they began implementing in Fall 2017. Mr. McKalips stated that they banned some materials and put very stringent limits on contamination of others, and all of this combined had created a glut in the recyclables market.

Mr. McKalips explained that most people recycled because they felt it was the good environmental thing to do, but if you picture them as products it provides a different perspective. He stated that there are good relationships locally with manufacturers in the Mid-Atlantic, which allowed Rivanna to continue having a source for things to go – although the global market was impacting the price offered for those materials. Mr. McKalips stated that McIntire accepts aluminum beverage cans, which were separated from regular cans because of their value; #2 and #4 plastic bags, including grocery bags but also Ziploc bags; and compostable food waste.

Mr. McKalips reported that metal products went to Gerdau, which had a local office, and then onto their sort facility to break it down into steel, aluminum, etc. Sonoco accepts corrugated products and other products. Plastic materials 1-7 went to a sort and material recovery facility in Raleigh, and glass bottles and jars were not particularly sought after but were accepted by Strategic Materials of North Carolina, which ran them through an optical sorter and turned them back into containers. He stated that office paper products went to a mill in Virginia, where they were turned into paper towels and toilet papers; newsprint went to a mill in North Carolina, along with telephone books and hard and softbound books.

Mr. McKalips stated that there was a good demand for #1 and #2 plastics domestically in the U.S.; #3 through #7 plastics did not have a good established market, so they needed to consider whether they should be collected if they weren’t being recycled. He noted they also needed to focus on value, which can be done by reducing contamination – as many people dispose of things into the wrong containers. Mr. McKalips noted that he had read a study that indicated that 87% of people did “wish cycling” whereby they put unrecyclable items in a bin in hopes they would get recycled – but that could spoil an entire load of recycling. He presented an image showing a mixed plastics compactor, noting the presence of bubble wrap and blue storage containers in the container. Mr. McKalips also noted the presence of plastic bags and aluminum foil trays in the aluminum bin, which reduced the value of the load.

Ms. Galvin asked if there was signage around the bins.

Mr. McKalips responded that there were lots of signs, which had been changed periodically in an attempt to inform people, but the solution to the mistakes was going to be education.

Dr. Palmer commented that a lot of different signage had been tried, and the sign that included everything that could go in the bins had been replaced.

Mr. McKalips reported that staff was working towards a master plan, which would be preliminarily presented to the board in August, with plans for Ivy included, and hopefully would be finalized as a plan in November. He stated that he would like to work on commercial interests

with recycling products to make them cleaner and add value to them, such as bailing cardboard and trucking to make it easy on the commercial buyer.

Dr. Palmer noted that the County had a solid waste committee, which was charged with education, and they had recently been paid to do a public service announcement (PSA) that informed the public as to what they could do but did not address the contamination issue. She stated that she was interested in moving that committee and its educational aspects to be a Rivanna committee, because the City and County needed to be involved – particularly with recycling. Dr. Palmer noted there was a big debate in the recycling community as to whether to continue to pick things up if they weren't being recycling, but her feeling was that they should continue picking up things that could be totally recycled. She added that the solid waste committee had been instrumental in informing the Board of Supervisors as to the needs of the community to get the new transfer station funded, and the City's representatives could inform City Council to have this become a collaborative effort.

Ms. Galvin noted that Paul Oberdorfer was the City's representative on the committee.

Mr. Oberdorfer stated that his perspective was that with the good things happening in regional collection, there should be alignment with education – either in the City or outside of it – and it was important to have a unified message rather than having it broken down by audience.

Mr. Mawyer noted that the Rivanna charter talked about having a technical advisory committee comprised of representatives from both, to provide feedback, education, etc. – and going back to that TAC committee might be something to consider.

Dr. Palmer commented that the TAC committee in the County was highly professional, comprised of people who knew a lot about recycling.

Ms. Galvin noted that the TAC would work out the logistics of an aligned public education campaign and would include City and County representatives, with Rivanna board members returning to Council and the Board with that information.

Dr. Palmer stated that the County's committee provided reports every six months to the Board of Supervisors and came before the Board about once a year.

Mr. Jones commented that this made a lot of sense, and he would like to see who comprised that committee in the past.

Mr. Krueger pointed out that it was a Citizens Advisory Committee, not a Technical Advisory Committee, and the RSWA's charter provided for the committee's appointment. He noted that because it is a committee of the authority, it would be a public body and would have to keep minutes, be subject to FOIA, advertise its meetings, etc.

Mr. Jones asked if it made sense to put this on an upcoming agenda for consideration.

Dr. Palmer noted that she would like to, and in the meantime they could have more discussion. She stated that they would also want to see how the County's Solid Waste Advisory Committee would dovetail into this, as that committee had worked hard on getting things going and getting the Board comfortable with their recommendations.

Ms. Galvin stated that she would like to know how the City would get members on this.

Mr. Krueger noted that the purpose of the County's committee was much broader than the limited purpose as discussed for the new committee, and the question would be whether to morph them together or keep them on parallel tracks, with Rivanna's focus being education.

Dr. Palmer pointed out that the County SWAC's primary purpose was intended to be education, and they were trying to evolve.

Mr. McKalips commented that whatever they did, they would want to keep those valuable people in the mix.

Mr. Mawyer noted the charter indicated that there would be three members from the City, three members from the County, and two from the University – all appointed – as well as a ninth member to be appointed; and they would all serve two-year terms.

Mr. Krueger noted that the Board had the power to broaden or reduce the scope as they saw fit.

Ms. Galvin stated that she had been receiving questions about the Chinese pulling out of the recycling market, so this was a timely discussion.

Mr. McKalips noted that if a big pile of unrecycled material that was going unused, someone would figure out how to use it and create a business around it.

9. OTHER ITEMS FROM BOARD/STAFF NOT ON AGENDA

There were none presented.

10. CLOSED MEETING

At 2:31 p.m., Mr. Jones moved to recess the RSWA meeting. Mr. Oberdorfer seconded the motion, which passed unanimously (7-0).

At 3:55 p.m., Mr. Jones moved to reconvene the RSWA meeting. Ms. Galvin seconded the motion, which passed unanimously (7-0).

There was a joint closed meeting held with the Rivanna Water and Sewer Authority.

Mr. Krueger read the following resolution into the record:

223 RESOLVED that the Board of Directors of the Rivanna Solid Waste Authority enter into
224 a joint closed meeting with the Rivanna Water and Sewer Authority Board to discuss
225 confidential personnel matters as permitted by Section 2.2-3711.A.1 of the Code of Virginia.
226

227 **Mr. Jones moved to adopt a resolution to enter the joint closed session. Mr. Oberdorfer**
228 **seconded the motion, which passed unanimously (7-0).**
229

230 **The board entered a closed meeting at 3:55 p.m.**
231

232 Mr. Krueger read the following resolution into the record:
233

234 WHEREAS, the Rivanna Solid Waste Authority has convened a joint closed meeting
235 with the Rivanna Water and Sewer Authority on this date pursuant to an affirmative recorded
236 vote and in accordance with the provisions of the Virginia Freedom of Information Act; and
237

238 WHEREAS, Section 2.2-3712.D of the Code of Virginia requires a certification by the
239 Rivanna Solid Waste Authority that such closed meeting was conducted in conformity with
240 Virginia law;
241

242 NOW, THEREFORE, BE IT RESOLVED that the Rivanna Solid Waste Authority
243 hereby certifies that, to the best of each member's knowledge, (i) only public business matters
244 lawfully exempted from open meeting requirements by Virginia law were discussed in the
245 executive meeting to which this certification resolution applies, (ii) only such public business
246 matters as were identified in the motion convening the closed meeting were heard, discussed or
247 considered by the Rivanna Solid Waste Authority.
248

249 **Mr. Jones moved to adopt a resolution for the RSWA to reenter an open meeting. Mr.**
250 **Henry seconded the motion, which passed 6-0. Mr. Gaffney had left the meeting and was**
251 **not present for the vote.**
252

253 **The board reentered into an open meeting at 4:36 p.m.**
254

255 **Dr. Palmer moved for the RSSA to authorize a 5% raise for Mr. Mawyer, bringing his**
256 **annual salary from \$183,712 to \$192,897.60, and will also reimburse \$1,950 for**
257 **taxes imposed on a prior moving expense reimbursement. Ms. Galvin seconded the motion,**
258 **which passed 6-0. Mr. Gaffney had left the meeting and was not present for the vote.¹**
259

260 ***11. ADJOURNMENT***

261

262 **Mr. Jones moved to adjourn the RSWA Board meeting. Ms. Galvin seconded the motion,**
263 **which passed 6-0. Mr. Gaffney had left the meeting and was not present for the vote.**
264

265 **The RSWA Board adjourned its meeting at 4:40 p.m.**

¹ Editors Note: Mr. Mawyer's entire salary is paid by the Rivanna Water and Sewer Authority, and the portion of his time allocated to RSWA is reimbursed by RSWA to RSWA.

DRAFT



**RIVANNA WATER & SEWER AUTHORITY
RIVANNA SOLID WASTE AUTHORITY
BOARD OF DIRECTORS**

Joint Resolution of Appreciation for Maurice Jones

WHEREAS, Mr. Jones has served as a member of the Rivanna Water & Sewer Authority and Solid Waste Authority Boards of Directors since 2010; and

WHEREAS, over that same period Mr. Jones has demonstrated leadership in water and sewer, solid waste and recycling services; and has been a valuable member of the Boards of Directors and a resource to the Authorities; and

WHEREAS, Mr. Jones's understanding of the water, sewer, solid waste and recycling operations of the City of Charlottesville, the Water & Sewer Authority and the Solid Waste Authority has supported a strategic decision-making process that provided benefits to the customers served by the City of Charlottesville as well as the community as a whole. During Mr. Jones's tenure and through his efforts, major projects were completed including:

- a Community Water Supply Plan, to ensure an adequate water supply for the next 50 years
- the Expanded Ragged Mountain Reservoir Dam
- the Rivanna Sewer Pumping Station
- Odor Control Improvements at the Moores Creek Advanced Water Resource Recovery Facility
- Granular Activated Carbon Filters for the water treatment plants
- a Strategic Plan for both Authorities; and

WHEREAS, the Water & Sewer Authority and Solid Waste Authority Boards of Directors are most grateful for the professional and personal contributions Mr. Jones has provided to both Authorities and to the community; and

NOW, THEREFORE, BE IT RESOLVED that the Rivanna Water & Sewer Authority and the Rivanna Solid Waste Authority Boards of Directors recognizes, thanks, and commends Mr. Jones for his distinguished service, efforts, and achievements as a member of the Rivanna Water & Sewer Authority and the Rivanna Solid Waste Authority, and presents this Resolution as a token of esteem, with its best wishes in his future endeavors.

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

Michael Gaffney, Chairman
Jeff Richardson
Kathy Galvin
Liz Palmer
Gary O'Connell
Lauren Hildebrand
Paul Oberdorfer
Trevor Henry



**RIVANNA SOLID WASTE AUTHORITY
BOARD OF DIRECTORS**

Resolution of Appreciation for Mark Brownlee

WHEREAS, Mr. Brownlee has served in numerous position, most recently as the Solid Waste Manager since 2000; and

WHEREAS, over the same period of 18 years, Mr. Brownlee has demonstrated leadership in his field and has been a valuable resource to the Authority and its employees; and

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

WHEREAS, the Rivanna Solid Waste Authority Board of Directors is most grateful for the professional and personal contributions Mr. Brownlee has provided to the Rivanna Solid Waste Authority, its customers and its employees; and

NOW, THEREFORE, BE IT RESOLVED that the Rivanna Solid Waste Authority recognizes, thanks and commends Mr. Brownlee for his distinguished service, efforts and achievements as a member of the Rivanna Solid Waste 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 Solid Waste Authority.

Michael Gaffney, Chairman
Trevor Henry
Kathleen Galvin
Mike Murphy
Paul Oberdorfer
Liz Palmer
Jeff Richardson



**RIVANNA SOLID WASTE AUTHORITY
BOARD OF DIRECTORS**

Resolution of Appreciation for Kenneth Chapman

WHEREAS, Mr. Chapman has served in numerous positions, most recently as a Driver/Equipment Operator since 2003; and

WHEREAS, over the same period of 15 years, Mr. Chapman has demonstrated leadership in his field and has been a valuable resource to the Authority and its employees; and

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

WHEREAS, the Rivanna Solid Waste Authority Board of Directors is most grateful for the professional and personal contributions Mr. Chapman has provided to the Rivanna Solid Waste Authority, its customers and its employees; and

NOW, THEREFORE, BE IT RESOLVED that the Rivanna Solid Waste Authority recognizes, thanks and commends Mr. Chapman for his distinguished service, efforts and achievements as a member of the Rivanna Solid Waste 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 Solid Waste Authority.

Michael Gaffney, Chairman
Trevor Henry
Kathleen Galvin
Mike Murphy
Paul Oberdorfer
Liz Palmer
Jeff Richardson



MEMORANDUM

**TO: RIVANNA SOLID WASTE AUTHORITY
BOARD OF DIRECTORS**

FROM: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: EXECUTIVE DIRECTOR'S REPORT

DATE: AUGUST 28, 2018

New Ivy Refuse Transfer and Recycling Station

SP GOAL: Infrastructure and Master Planning

The ribbon cutting ceremony was held on August 23, 2018. The facility will begin accepting and transferring refuse in early September.

Electronic Waste Recycling Day

SP GOAL: Environmental Stewardship; Solid Waste Services

The first Electronic Waste (eWaste) Amnesty Day was a success. The event was held at the Ivy MUC on Saturday, July 21, 2018, and 244 residents brought eWaste totaling 14.55 tons. Both trailers, brought by CARE Environmental, were filled. The next eWaste event will be considered during the annual budgeting process for the spring 2019.

Household Hazardous Waste and Bulky Waste Amnesty Days

SP GOAL: Environmental Stewardship; Solid Waste Services

The fall Household Hazardous Waste and Bulky Waste Amnesty days will be on the following dates:

- | | |
|---|-------------------------|
| • Residential Household Hazardous Waste | September 28 & 29, 2018 |
| • Commercial Hazardous Waste | September 27, 2018 |
| • Bulky Waste – Furniture/Mattresses | October 6, 2018 |
| • Bulky Waste – Appliances | October 13, 2018 |
| • Bulky Waste – Tires | October 20, 2018 |

Community Outreach

SP GOALS: Communication & Collaboration

Our Director of Solid Waste, Phil McKalips, provided a tour of the McIntire Recycling Center to a class from the Lafayette School.



RIVANNA SOLID WASTE AUTHORITY
695 Moores Creek Lane • Charlottesville, Virginia 22902 • (434) 977-2970

MEMORANDUM

**TO: RIVANNA SOLID WASTE AUTHORITY
BOARD OF DIRECTORS**

**FROM: LONZY WOOD, DIRECTOR OF FINANCE AND
ADMINISTRATION**

SUBJECT: JUNE 2018 FINANCIAL SUMMARY

DATE: AUGUST 28, 2018

The results of operations and remediation activities for fiscal year ending June 30, 2018 are summarized below:

	Operating <u>Results</u>	Remediation <u>Results</u>	<u>Total</u>
Total Revenues	\$ 1,412,804	\$ -	\$ 1,412,804
Total Expenses	<u>(2,130,476)</u>	<u>(666,818)</u>	<u>(2,797,294)</u>
Net operating results	(717,672)	(666,818)	(1,384,490)
Support - MOU & Local	<u>640,098</u>	<u>396,787</u>	<u>1,036,885</u>
Surplus/(Deficit)*	<u>\$ (77,574)</u>	<u>\$ (270,031)</u>	<u>\$ (347,605)</u>

* Cash reserves are used when deficits occur. (Use of up to \$278,000 in reserves for an expected shortfall for remediation was included in FY 2018 budget.)

Total operating revenues for the year were 9.5% over budget and total operating expenses were 9.5% over budget. The Authority processed 17,642 tons of waste in the fiscal year. A breakdown of net revenue or cost per ton, including overhead and administrative support costs, is shown below.

	<u>Ivy MSW</u>	<u>Ivy - All Other</u>	<u>Recycling</u>	<u>Total</u>
Tonnage	8,423	7,338	1,881	17,642
Net operating costs	\$ (282,435)	\$ (113,415)	\$ (321,823)	\$ (717,673)
Net revenue (cost) per ton	\$ (33.53)	\$ (15.46)	\$ (171.09)	\$ (40.68)

Please note that the budget and these monthly budget vs. actual statements are prepared on a different basis than the comprehensive annual financial report (CAFR). Year-end adjustments are recorded every year in order to conform to the accounting principles required for the CAFR. These monthly statements were prepared prior to recording those year-end adjustments.

Attachments

RIVANNA SOLID WASTE AUTHORITY
REVENUE AND EXPENSE SUMMARY REPORT
FISCAL YEAR 2018
FOR THE MONTH ENDED 6/30/18

Target Rate: 100.00%

Operations	Budget	Actual Y-T-D	IVY OPERATIONS		MSW-IVY TRANSFER		RECYCLE OPERATIONS		ADMIN. SERVICES	
				Actual		Actual		Actual		Actual
			Budget	Y-T-D	Budget	Y-T-D	Budget	Y-T-D	Budget	Y-T-D
REVENUES										
Ivy Operations Tipping Fees	\$ 189,860	188,913	\$ 189,860	188,913						
Ivy MSW Transfer Tipping Fees	660,315	689,928			660,315	689,928				
Material & Other Sales-Ivy	112,500	145,127	112,500	145,127						
Recycling Revenues	222,400	236,012					222,400	236,012		
Other Revenues	78,000	101,587			78,000	101,587				
Interest & Fees	27,200	51,237							27,200	51,237
Total Revenues Budget vs. Actual*	\$ 1,290,275	\$ 1,412,804 109.50%	\$ 302,360	\$ 334,040 110.48%	\$ 738,315	\$ 791,515 107.21%	\$ 222,400	\$ 236,012 106.12%	\$ 27,200	\$ 51,237 188.37%
EXPENSES										
Ivy Operations	297,616	334,799	297,616	334,799						
Ivy MSW Transfer	930,685	961,294			930,685	961,294				
Recycling Operations	351,106	467,710					351,106	467,710		
Administration	489,723	501,859							489,723	501,859
Total Expenses Budget vs. Actual*	2,069,130	2,265,663 109.50%	297,616	334,799 112.49%	930,685	961,294 103.29%	351,106	467,710 133.21%	489,723	501,859 102.48%
Net Results Before Administrative Allocation	\$ (778,855)	\$ (852,859)	\$ 4,744	\$ (760)	\$ (192,370)	\$ (169,779)	\$ (128,706)	\$ (231,699)	\$ (462,523)	\$ (450,622)
Administrative allocations: Administrative costs to Envir. MOU (below) Administrative costs to Operations	138,757	135,187							138,757	135,187
	-	-	(115,631)	(112,656)	(115,631)	(112,656)	(92,505)	(90,124)	323,766	315,436
Net Operating Income (Loss)	\$ (640,098)	\$ (717,673)	\$ (110,887)	\$ (113,415)	\$ (308,001)	\$ (282,434)	\$ (221,211)	\$ (321,823)	\$ -	\$ -
Other Funding Sources										
Local Government Contributions	640,098	640,098								
County Contribution - Capital Grant	2,087,000	1,771,792								
Transfer to Capital Fund - Transfer Station	(2,087,000)	(1,771,792)								
Surplus (Deficit) - Operations	\$ -	\$ (77,574)								

<u>Environmental Programs</u>		
	Budget	Actual Y-T-D
REVENUES		
Remediation Support	396,786	396,787
Total Revenues	396,786	396,787
Budget vs. Actual*		100.00%
EXPENSES		
Ivy Environmental	536,029	531,632
Administrative Allocation	138,757	135,187
	674,786	666,818
Budget vs. Actual*		98.82%
Cash Reserves Used	278,000	270,031
Surplus (Deficit) - Environmental	\$ -	\$ -
Total Surplus (Deficit)	\$ -	\$ (77,574)

Rivanna Solid Waste Authority
Monthly Financial Status Report
FY 2018

	July	August	September	October	November	December	January	February	March	April	May	June	Year-to-Date
<u>Revenues</u>													
Ivy Operations Tipping Fees	\$ 10,083	\$ 16,063	\$ 10,150	\$ 14,870	\$ 21,314	\$ 9,182	\$ 5,781	\$ 11,229	\$ 25,963	\$ 16,226	\$ 22,112	\$ 25,940	\$ 188,913
Ivy MSW Transfer Tipping Fees	68,560	71,892	58,055	56,147	52,912	52,294	47,808	47,376	57,743	49,789	62,735	64,617	689,928
Ivy Material Sales	14,991	10,795	9,812	8,787	9,164	7,846	8,885	12,250	14,964	14,896	16,139	16,600	145,127
Recycling	19,277	19,328	18,362	24,542	50,802	16,788	23,280	10,326	16,090	11,829	11,320	14,066	236,012
Other Revenues	8,603	8,941	7,801	11,887	7,030	5,499	9,372	5,673	8,513	7,597	9,248	11,423	101,587
Remediation Support	108,099	51,085	-	28,117	-	51,085	28,117	51,085	-	79,201	-	-	396,787
Interest & Late Fees	4,870	3,567	3,668	4,365	3,328	3,567	5,440	3,403	3,834	5,981	4,505	4,709	51,237
Total Revenues	\$ 234,483	\$ 181,671	\$ 107,848	\$ 148,714	\$ 144,550	\$ 146,261	\$ 128,682	\$ 141,342	\$ 127,107	\$ 185,519	\$ 126,059	\$ 137,355	\$ 1,809,591
<u>Expenses</u>													
Ivy Operations	\$ 22,573	\$ 15,021	\$ 19,122	\$ 19,378	\$ 26,187	\$ 20,863	\$ 44,737	\$ 13,689	\$ 18,500	\$ 23,652	\$ 21,294	\$ 89,783	\$ 334,799
Ivy Environmental	28,859	20,351	20,774	62,631	32,491	51,199	44,913	38,828	39,125	25,997	91,106	75,357	531,632
Ivy MSW Transfer	82,146	78,013	106,013	62,005	90,246	64,928	76,272	35,057	86,359	83,781	90,248	106,226	961,294
Recycling Operation	31,760	43,092	34,997	40,913	28,910	38,017	41,353	25,447	37,473	52,471	25,393	67,885	467,710
Administration	44,005	37,038	49,837	38,052	38,677	39,060	62,283	38,256	38,057	37,440	38,123	41,030	501,859
Total Expenses	\$ 209,343	\$ 193,515	\$ 230,743	\$ 222,979	\$ 216,511	\$ 214,067	\$ 269,558	\$ 151,277	\$ 219,515	\$ 223,342	\$ 266,165	\$ 380,280	\$ 2,797,294
Net Operating Income (Loss)	\$ 25,140	\$ (11,844)	\$ (122,894)	\$ (74,265)	\$ (71,961)	\$ (67,806)	\$ (140,876)	\$ (9,934)	\$ (92,408)	\$ (37,823)	\$ (140,106)	\$ (242,926)	\$ (987,704)
<u>Other Funding Sources</u>													
Local Government Contributions	16,591	143,434	-	16,591	-	143,434	16,591	143,434	-	160,025	-	-	640,098
County Contribution - Capital Grant	-	-	60,495	-	-	41,773	218,900	343,081	-	234,138	615,228	258,176	1,771,792
Transfer to Capital Fund - Transfer Station	-	-	(60,495)	-	-	(41,773)	(218,900)	(343,081)	-	(234,138)	(615,228)	(258,176)	(1,771,792)
Use of Cash Reserves	-	-	-	-	34,150	10,762	33,850	(1,801)	49,392	-	57,425	86,254	270,032
Surplus (Deficit)	\$ 41,730	\$ 131,590	\$ (122,894)	\$ (57,675)	\$ (37,811)	\$ 86,389	\$ (90,435)	\$ 131,698	\$ (43,016)	\$ 122,202	\$ (82,681)	\$ (156,672)	\$ (77,574)

Rivanna Solid Waste Authority
Monthly Cash Flow Report
FY 2018

	July	August	September	October	November	December	January	February	March	April	May	June
Net Operating Income	\$ 25,140	\$ (11,844)	\$ (122,894)	\$ (74,265)	\$ (71,961)	\$ (67,806)	\$ (140,876)	\$ (9,934)	\$ (92,408)	\$ (37,823)	\$ (140,106)	\$ (242,926)
Adjustments for cash flow purposes to show funds available for operations:												
Local Government Contributions	16,591	143,434	-	16,591	-	143,434	16,591	143,434	-	160,025	-	-
(Increase) decrease in accounts receivable	(55,323)	95,520	4,159	12,200	(27,175)	21,038	(3,604)	(392)	(18,118)	21,679	(20,389)	(10,743)
Increase (decrease) in accounts payable	50,753	(71,523)	41,132	(293,916)	(557)	(10,856)	45,875	(54,159)	201	39,012	(28,504)	386,295
Capital reserve fund interest not available in operating cash	(2,030)	(928)	(883)	(2,057)	(906)	(987)	(2,376)	(1,084)	(1,283)	(2,810)	(508)	(1,100)
Trust fund interest not available in operating cash	(150)	(170)	(175)	(173)	(181)	(177)	(199)	(218)	(204)	(248)	(271)	(290)
Trust fund deposit for Transfer Station permit								(1,572)				
Increase (Decrease) in Operating Cash	\$ 34,981	\$ 154,489	\$ (78,661)	\$ (341,620)	\$ (100,779)	\$ 84,647	\$ (84,588)	\$ 76,075	\$ (111,812)	\$ 179,835	\$ (189,777)	\$ 131,236
Operating Cash Balance - Beginning	2,896,807	2,931,789	3,086,278	3,007,617	2,665,997	2,565,218	2,649,864	2,565,276	2,641,351	2,529,539	2,709,374	2,519,598
Operating Cash Balance - Ending	<u>\$ 2,931,789</u>	<u>\$ 3,086,278</u>	<u>\$ 3,007,617</u>	<u>\$ 2,665,997</u>	<u>\$ 2,565,218</u>	<u>\$ 2,649,864</u>	<u>\$ 2,565,276</u>	<u>\$ 2,641,351</u>	<u>\$ 2,529,539</u>	<u>\$ 2,709,374</u>	<u>\$ 2,519,598</u>	<u>\$ 2,650,834</u>

Revenue Detail Report

Page 4

Rivanna Solid Waste Authority Historical Material Tonnage Report - Recycling Fiscal Years 2014-2018
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Fiscal Year 2014	Fiscal Year 2015	Fiscal Year 2016	Fiscal Year 2017	Fiscal Year 2018
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In U.S. Tons

Fiber Products

Newspaper, magazines, catalogs
Cardboard (corrugated)
Mixed paper and phone books
File stock (office paper)

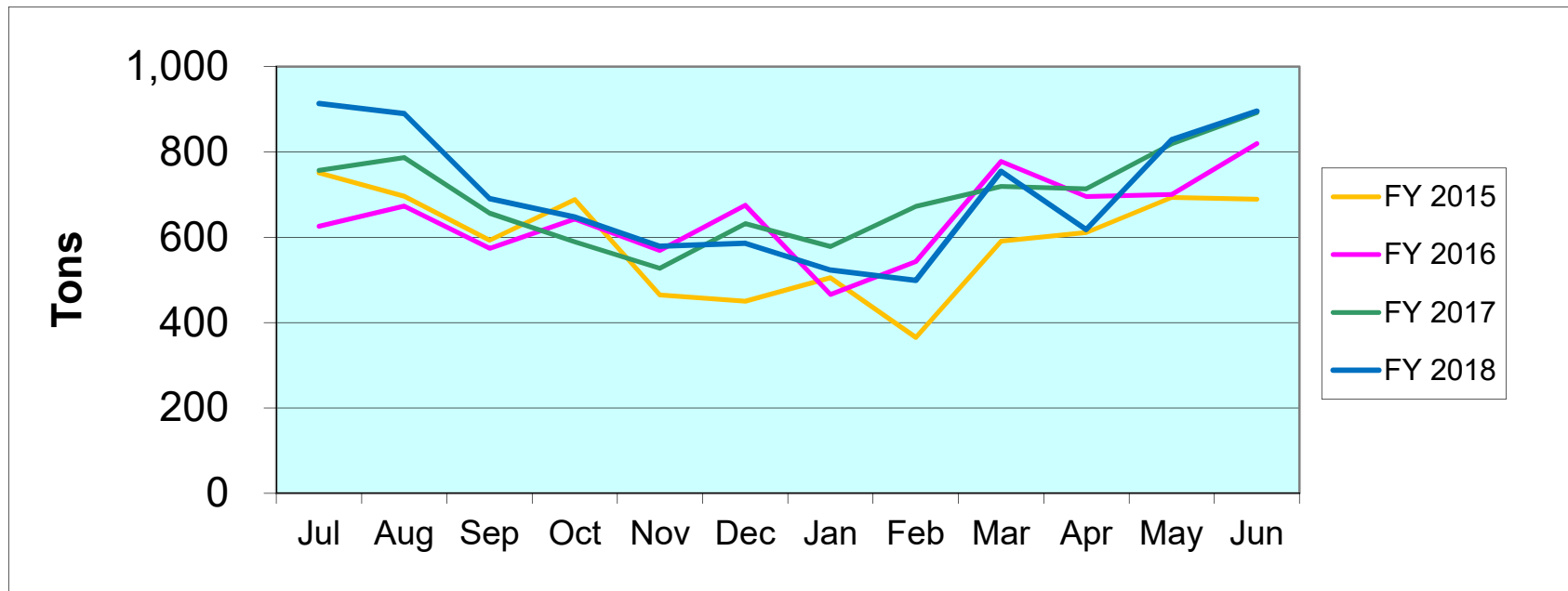
	640	524	512	419	424
	279	278	459	812	763
	265	212	214	156	187
	164	125	125	122	111
Total Fiber Products	1,348	1,139	1,310	1,509	1,485

Other Products

Glass
Metal Cans
Plastic

	249	219	191	252	252
	34	30	32	31	41
	98	95	82	86	103
Total Other Products	381	344	305	369	396
Total	1,729	1,483	1,615	1,878	1,881

**Rivanna Solid Waste Authority
Ivy MSW Transfer Tonnages
FY 2015 - 2018**





RIVANNA SOLID WASTE AUTHORITY
695 Moores Creek Lane • Charlottesville, Virginia 22902 • (434) 977-2970

MEMORANDUM

**TO: RIVANNA SOLID WASTE AUTHORITY
BOARD OF DIRECTORS**

**FROM: LONZY WOOD, DIRECTOR OF FINANCE AND
ADMINISTRATION**

SUBJECT: JULY 2018 FINANCIAL SUMMARY

DATE: AUGUST 28, 2018

The results of operations and remediation activities for the first month of fiscal year 2019 are summarized below and in the attached statements.

	<u>Operating Results</u>	<u>Remediation Results</u>	<u>Total</u>
Total Revenues	\$ 130,230	\$ -	\$ 130,230
Total Expenses	<u>(149,447)</u>	<u>(47,508)</u>	<u>(196,955)</u>
Net operating results	(19,217)	(47,508)	(66,725)
Support - MOU & Local	-	79,982	79,982
Surplus/(Deficit)*	<u>\$ (19,217)</u>	<u>\$ 32,474</u>	<u>\$ 13,257</u>

* Cash reserves are used when deficits occur. (Use of up to \$390,000 in reserves for an expected shortfall for remediation was included in FY 2019 budget.)

Total operating revenues for July were about 2% over budget and total operating expenses were 2% under budget. The Authority processed 2,332 tons of waste in July. A breakdown of net revenue or cost per ton, including overhead and administrative support costs, is shown below.

	<u>Ivy MSW</u>	<u>Ivy - All Other</u>	<u>Recycling</u>	<u>Total</u>
Tonnage	778	1,354	200	2,332
Net operating revenue (costs)	\$ 1,383	\$ 4,931	\$ (37,531)	\$ (31,217)
Net revenue (cost) per ton	\$ 1.78	\$ 3.64	\$ (187.66)	\$ (13.39)

Attachments

Target Rate: 8.33%

Operations	Budget	Actual Y-T-D	IVY OPERATIONS		MSW-IVY TRANSFER		RECYCLE OPERATIONS		ADMIN. SERVICES	
				Actual		Actual		Actual		Actual
			Budget	Y-T-D	Budget	Y-T-D	Budget	Y-T-D	Budget	Y-T-D
REVENUES										
Ivy Operations Tipping Fees	\$ 158,960	26,096	\$ 158,960	26,096						
Ivy MSW Transfer Tipping Fees	648,200	58,095			648,200	58,095				
Material & Other Sales-Ivy	121,500	15,367	121,500	15,367						
Recycling Revenues	251,900	13,491					251,900	13,491		
Other Revenues	77,200	10,346			77,200	10,346				
Interest & Fees	44,500	6,834							44,500	6,834
Total Revenues Budget vs. Actual*	\$ 1,302,260	\$ 130,230 10.00%	\$ 280,460	\$ 41,463 14.78%	\$ 725,400	\$ 68,441 9.43%	\$ 251,900	\$ 13,491 5.36%	\$ 44,500	\$ 6,834 15.36%
EXPENSES										
Ivy Operations	324,245	24,197	324,245	24,197						
Ivy MSW Transfer	1,186,282	42,723			1,186,282	42,723				
Recycling Operations	452,490	41,155					452,490	41,155		
Administration	694,924	56,173							694,924	56,173
Total Expenses Budget vs. Actual*	2,657,941	164,248 6.18%	324,245	24,197 7.46%	1,186,282	42,723 3.60%	452,490	41,155 9.10%	694,924	56,173 8.08%
Net Results Before Administrative Allocation	\$ (1,355,681)	\$ (34,018)	\$ (43,785)	\$ 17,266	\$ (460,882)	\$ 25,718	\$ (200,590)	\$ (27,663)	\$ (650,424)	\$ (49,339)
Administrative allocations:										
Administrative costs to Envir. MOU (below)	195,127	14,802							195,127	14,802
Administrative costs to Operations	-	-	(162,606)	(12,335)	(162,606)	(12,335)	(130,085)	(9,868)	455,297	34,537
Net Operating Income (Loss)	\$ (1,160,554)	\$ (19,217)	\$ (206,391)	\$ 4,931	\$ (623,488)	\$ 13,383	\$ (330,675)	\$ (37,531)	\$ -	\$ -
Other Funding Sources										
Local Government Contributions	1,160,554	-								
County Contribution - Capital Grant	-	260,104								
Transfer to Capital Fund - Transfer Station	-	(260,104)								
Surplus (Deficit) - Operations	\$ (0)	\$ (19,217)								

<u>Environmental Programs</u>		
	Budget	Actual Y-T-D
REVENUES		
Remediation Support	383,741	79,982
Total Revenues	383,741	79,982
Budget vs. Actual*		20.84%
EXPENSES		
Ivy Environmental	578,614	32,707
Administrative Allocation	195,127	14,802
	773,741	47,508
Budget vs. Actual*		6.14%
Cash Reserves Used	390,000	-
Surplus (Deficit) - Environmental	\$ -	\$ 32,474
Total Surplus (Deficit)	\$ (0)	\$ 13,257

**Rivanna Solid Waste Authority
Monthly Financial Status Report
FY 2019**

	July	Year-to-Date
<u>Revenues</u>		
Ivy Operations Tipping Fees	\$ 26,096	\$ 26,096
Ivy MSW Transfer Tipping Fees	58,095	58,095
Ivy Material Sales	15,367	15,367
Recycling	13,491	13,491
Other Revenues	10,346	10,346
Remediation Support	79,982	79,982
Interest & Late Fees	6,834	6,834
Total Revenues	\$ 210,212	\$ 210,212
<u>Expenses</u>		
Ivy Operations	\$ 24,197	\$ 24,197
Ivy Environmental	32,707	32,707
Ivy MSW Transfer	42,723	42,723
Recycling Operation	41,155	41,155
Administration	56,173	56,173
Total Expenses	\$ 196,955	\$ 196,955
Net Operating Income (Loss)	\$ 13,257	\$ 13,257
<u>Other Funding Sources</u>		
Local Government Contributions	\$ -	\$ -
County Contribution - Capital Grant	260,104	260,104
Transfer to Capital Fund - Transfer Station	(260,104)	(260,104)
<u>Use of Cash Reserves</u>	-	-
Surplus (Deficit)	\$ 13,257	\$ 13,257

Rivanna Solid Waste Authority
Monthly Cash Flow Report
FY 2019

	July
Net Operating Income	\$ 13,257
Adjustments for cash flow purposes to show funds available for operations:	
Local Government Contributions	-
(Increase) decrease in accounts receivable	(97,902)
Increase (decrease) in accounts payable	(408,602)
Capital reserve fund interest not available in operating cash	(3,463)
Trust fund interest not available in operating cash	(294)
Trust fund release for Transfer Station permit	55,968
Increase (Decrease) in Operating Cash	<u>\$ (441,037)</u>
Operating Cash Balance - Beginning	<u>2,364,893</u>
Operating Cash Balance - Ending	<u><u>\$ 1,923,856</u></u>

Rivanna Solid Waste Authority
Fiscal Year 2019
July 2018
Revenue Detail Report

Revenue Line Item	Tonnage		Revenue				
	Budget FY 2019	Actual YTD	Budget FY 2019	Budget YTD	Actual YTD	Budget vs. Actual	Variance %
IVY TIPPING FEES							
Clean Fill Material	5,000	1,164	\$ 50,000	\$ 4,167	\$ 11,608	\$ 7,441	178.59%
Grindable Vegetative Material	1,500	132	72,000	6,000	6,775	775	12.92%
Pallets	70	6	3,360	280	298	18	6.43%
Tires, Whole	90	31	17,100	1,425	5,849	4,424	310.46%
Tires/White Good (per item)			16,500	1,375	1,566	191	13.89%
<i>Subtotal</i>	6,660	1,333	\$ 158,960	\$ 13,247	\$ 26,096	\$ 12,849	97.00%
IVY TRANSFER STATION							
Compost Services	500	21	\$ 89,000	\$ 7,417	\$ 3,656	\$ (3,761)	68.64%
MSW Transfer Station	8,200	778	559,200	46,600	54,439	7,839	16.82%
<i>Subtotal</i>	8,200	778	\$ 648,200	\$ 54,017	\$ 58,095	\$ 4,078	7.55%
MATERIAL SALES - IVY							
Encore			\$ 19,000	\$ 1,583	\$ 1,760	\$ 177	11.16%
Metals			30,000	2,500	3,929	1,429	57.15%
Wood Mulch & Chips			22,000	1,833	2,807	974	53.11%
Hauling Fees			50,000	4,167	6,831	2,664	63.93%
Other Materials			500	42	41	(1)	-1.60%
<i>Subtotal</i>			\$ 121,500	\$ 10,125	\$ 15,367	\$ 5,242	51.78%
RECYCLING							
Material Sales			\$ 215,000	\$ 17,917	\$ 12,799	\$ (5,118)	-28.57%
Other Materials & Services			6,300	525	177	(348)	-66.27%
Grants-Operating			27,000	2,250	-	(2,250)	-100.00%
Hauling Fees			3,600	300	516	216	71.87%
<i>Subtotal</i>			\$ 251,900	\$ 20,992	\$ 13,491	\$ (7,500)	-35.73%
OTHER REVENUES							
Service Charge Fees			\$ 70,000	\$ 5,833	\$ 9,380	\$ 3,547	60.80%
Other Revenues			7,200	600	966	366	
			\$ 77,200	\$ 6,433	\$ 10,346	\$ 3,913	60.82%
REMEDIATION SUPPORT							
UVA Contribution			\$ 79,982	\$ 6,665	\$ 79,982	\$ 73,317	1100.00%
County Contribution			195,925	16,327	-	(16,327)	-100.00%
City Contribution			107,834	8,986	-	(8,986)	-100.00%
<i>Subtotal</i>			\$ 383,741	\$ 31,978	\$ 79,982	\$ 48,004	150.11%
INTEREST, LATE FEES, OTHER							
Trust Fund Interest			\$ 2,000	\$ 167	\$ 294	\$ 128	76.69%
Finance Charges			500	42	200	158	380.26%
Capital Reserve Fund Interest			17,000	1,417	3,463	2,046	144.42%
Operating Investment Interest			25,000	2,083	2,877	794	38.11%
<i>Subtotal</i>			\$ 44,500	\$ 3,708	\$ 6,834	\$ 3,126	84.30%
Total	14,860	2,111	\$ 1,686,001	\$ 140,500	\$ 210,212	\$ 69,712	49.62%

Rivanna Solid Waste Authority Historical Material Tonnage Report - Recycling Fiscal Years 2015-2019
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Fiscal Year 2015	Fiscal Year 2016	Fiscal Year 2017	Fiscal Year 2018	Fiscal Year 2019 (July)
------------------------	------------------------	------------------------	------------------------	----------------------------------

In U.S. Tons

Fiber Products

Newspaper, magazines, catalogs
Cardboard (corrugated)
Mixed paper and phone books
File stock (office paper)

524	512	419	424	25
278	459	812	763	78
212	214	156	187	28
125	125	122	111	16
Total Fiber Products	1,139	1,310	1,509	1,485
				147

Other Products

Glass
Metal Cans
Plastic

219	191	252	252	51
30	32	31	41	2
95	82	86	103	-
Total Other Products	344	305	369	396
Total	1,483	1,615	1,878	1,881
				200



RIVANNA SOLID WASTE AUTHORITY
695 Moores Creek Lane • Charlottesville, Virginia 22902 • (434) 977-2970

MEMORANDUM

**TO: RIVANNA SOLID WASTE AUTHORITY
BOARD OF DIRECTORS**

**FROM: DAVID RHOADES, ASSISTANT SOLID WASTE MANAGER;
MARK BROWNLEE, SOLID WASTE MANAGER
PHILLIP MCKALIPS, DIRECTOR OF SOLID WASTE**

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

**SUBJECT: IVY MATERIAL UTILIZATION CENTER REPORT/
RECYCLING OPERATIONS UPDATE**

DATE: August 28, 2018

Ivy Material Utilization Center (IMUC) : DEQ Permit 132: 300 tons/day MSW limit

June 2018

- The IMUC transfer station operated 22 days and received a total of 985.28 tons of municipal solid waste (MSW), an average of 40.69 tons per day of operation. The monthly transfer station tonnage figures are attached to this report.
- 841.15 tons of non-MSW materials were received
- 1,736.43 tons were received as a combined total tonnage (MSW + non-MSW)
- 4,612 vehicles crossed the scales

July 2018

- The IMUC transfer station operated 21 days and received a total of 777.65 tons of municipal solid waste (MSW), an average of 37.03 tons per day of operation. The monthly transfer station tonnage figures are attached to this report.
- 1,302.15 tons of non-MSW materials were received
- 2,079.80 tons were received as a combined total tonnage (MSW + non-MSW)
- 3,689 vehicles crossed the scales

Paint Collection:

On August 16, 2018, the Ivy MUC shipped out the fifteenth full 30-yard container of paint since the program began in August 2016. RSWA currently has loaded 2 cubic yards of paint which will be included in a future shipment. Each 30-yard container holds about 4,200 one-gallon paint cans. This program continues to make paint disposal more convenient for residents and to alleviate some of the congestion during our fall and spring Household Hazardous Waste Days.

Compostable Food Waste Collection:

This program continues to operate smoothly at the IMUC. Approximately 1.5 65 gallon carts have been collected from residents so far. This service is free to County residents. A similar bin has been placed at the Transfer Station for the receipt of compostable food wastes from commercial customers.

Commercial customers are charged the established disposal fee of \$178 per ton.

The McIntire Recycle Center received 3.83 tons of compostable materials in June.

The McIntire Recycle Center received 3.52 tons of compostable materials in July.

Fall 2018 HHW and Bulky Waste Schedule:

The fall Household Hazardous Waste and Bulky Waste Amnesty days will be on the following dates:

- Residential Household Hazardous Waste September 28 & 29, 2018
- Commercial Hazardous Waste September 27, 2018
- Bulky Waste – Furniture/Mattresses October 6, 2018
- Bulky Waste – Appliances October 13, 2018
- Bulky Waste – Tires October 20, 2018

Recycling:

The annual Windshield Survey was conducted at McIntire Recycle Center from Monday, June 18, 2018 to Sunday, June 24, 2017. This was a complete 60-hour week of asking each customer if they were from Albemarle County or the City of Charlottesville, and their zip code. The goal of this year's survey was to see if there was an increase in customers after the closing of Vanderlinde Recycling. We measured this by the increase in customers using the facility from the previous year's surveys as shown on the following table.

<u>Date</u>	<u>Customers - County</u>	<u>Customers - City</u>	<u>Total Customers</u>
May 1-5, 2013	1010	531	1541
April 9-13, 2014	916	472	1388
April 22-26, 2015	760	326	1086
April 13-17-2016	973	363	1336
January 18-22, 2017	904	361	1265
June 18-21, 2018	1566	563	2141

A detailed spreadsheet is attached to the board report showing the results of the survey.

Electronic Waste Collection Totals:

Saturday, July 21, 2018: *E-waste*

A total of 350 residents of Albemarle and Charlottesville registered for the event. 244 confirmation forms were counted in the survey. A total of 14.55 tons of E-waste was received and processed by Care Environmental, which filled the two containers on site.

**Rivanna Solid Waste Authority
McIntire Recycle Center Customer Survey
June 18-24, 2018**

	County			City	Other Counties			Total
Monday 6/18/18		194		70		0		264
Wednesday 6/20/18		318		112		1		431
Thursday 6/21/18		266		83		6		355
Friday 6/22/18		266		83		3		352
Saturday 6/23/18		283		116		2		401
Sunday 6/24/18		239		99		0		338
Totals for the week		1566	72%	563	27%	12	1%	2141

Historical results

<u>Date</u>	<u>Total County</u>	<u>Total City</u>	<u>Total</u>
May 1-5 2013	1010	531	1541
April 9-13 2014	916	472	1388
April 22-26 2015	760	326	1086
April 13-17 2016	973	363	1336
January 18-22 2017	904	361	1265

Customers South and West of the McIntire Center

	Crozet	Batesville	Afton	North Garden
6/18/2018	8	2	1	11
6/20/2018	16	2	2	9
6/21/2018	2	0	2	9
6/22/2018	14	1	4	7
6/23/2018	20	1	1	3
6/24/2018	17	0	4	3
Total:	77	6	14	42

The goal of this survey was to see if there was an increase in customers after the close of Vanderlinde. We measured this by the increase/decrease of customers using the facility.

Notice: RSWA reported what customers provided as to their home location and has no independent means to verify accuracy.

Ivy Material Utilization Center
Daily Scale Crossing Data



June 1-30, 2018

Days of

Operation: 22

Operation: 22			MSW collected at Transfer Station (tons)				Non-MSW	
	Vehicles	Count	Citizen-Can	Construction	Domestic	MSW Total	Total Tons	
06/01/18	Friday	196	197	0.61	28.46	24.51	53.58	7.34
06/02/18	Saturday	307	357	0.86	9.79	32.87	43.52	10.45
06/03/18	Sunday	-	-	-	-	-	-	-
06/04/18	Monday	-	-	-	-	-	-	-
06/05/18	Tuesday	265	303	0.71	28.74	32.34	61.79	51.41
06/06/18	Wednesday	162	208	0.46	13.49	21.43	35.38	25.99
06/07/18	Thursday	188	220	0.58	20.96	17.22	38.76	39.24
06/08/18	Friday	199	216	0.68	21.08	29.38	51.14	32.55
06/09/18	Saturday	281	343	0.68	5.04	27.10	32.82	24.05
06/10/18	Sunday	-	-	-	-	-	-	-
06/11/18	Monday	-	-	-	-	-	-	-
06/12/18	Tuesday	180	203	0.86	18.22	19.25	38.33	97.80
06/13/18	Wednesday	174	179	0.18	27.51	14.20	41.89	24.58
06/14/18	Thursday	161	173	0.14	16.16	16.32	32.62	74.21
06/15/18	Friday	221	208	0.05	22.49	19.24	41.78	73.34
06/16/18	Saturday	319	310	0.42	17.71	28.62	46.75	17.14
06/17/18	Sunday	-	-	-	-	-	-	-
06/18/18	Monday	-	-	-	-	-	-	-
06/19/18	Tuesday	207	240	0.84	24.42	16.91	42.17	53.09
06/20/18	Wednesday	151	159	0.23	10.15	11.83	22.21	83.64
06/21/18	Thursday	147	161	0.04	18.84	11.87	30.75	75.81
06/22/18	Friday	152	143	-	15.79	22.87	38.66	17.15
06/23/18	Saturday	246	309	1.18	7.85	26.02	35.05	5.71
06/24/18	Sunday	-	-	-	-	-	-	-
06/25/18	Monday	-	-	-	-	-	-	-
06/26/18	Tuesday	232	305	0.48	32.22	21.10	53.80	36.91
06/27/18	Wednesday	176	221	0.21	15.59	16.97	32.77	31.09
06/28/18	Thursday	164	175	0.37	19.37	13.30	33.04	38.96
06/29/18	Friday	179	207	0.89	23.25	19.54	43.68	5.19
06/30/18	Saturday	305	347	0.53	15.15	29.11	44.79	15.50
Total		4,612	5,184	11.00	412.28	472.00	895.28	841.15
Average		210	236	0.50	18.74	21.45	40.69	38.23
Median		192	212	0.53	18.53	20.32	40.27	31.82
Maximum		319	357	1.18	32.22	32.87	61.79	97.80
Minimum		147	143	0.04	5.04	11.83	22.21	5.19

Material Type & Description

Citizen-Can: Roll-off container at the Ivy MUC Convenience Center-citizens dispose of prepaid trashbags

Construction: Construction/demolition debris (shingles, sheetrock, treated lumber, etc.)

Count: Transactions per item (appliances, hauling fees, service fees, tag-bag stickers, tires)

Domestic: Business/residential general or household waste

MSW: Materials processed/handled at the Transfer Station

Non-MSW: Materials processed/handled on-site

Vehicle: Transactions or vehicles processed in a day

Ivy Material Utilization Center
Daily Scale Crossing Data



July 1-31, 2018

Days of

Operation: 21

Days 61

Operation: 21			MSW collected at Transfer Station (tons)				Non-MSW
	Vehicles	Count	Citizen-Can	Construction	Domestic	MSW Total	Total Tons
07/01/18 Sunday	-	-	-	-	-	-	-
07/02/18 Monday	-	-	-	-	-	-	-
07/03/18 Tuesday	254	264	0.43	27.53	26.44	54.40	22.61
07/04/18 Wednesday	-	-	-	-	-	-	-
07/05/18 Thursday	160	172	0.08	13.22	15.92	29.22	8.74
07/06/18 Friday	186	203	0.09	27.06	16.57	43.72	22.42
07/07/18 Saturday	312	412	0.41	12.66	26.34	39.41	15.80
07/08/18 Sunday	-	-	-	-	-	-	-
07/09/18 Monday	-	-	-	-	-	-	-
07/10/18 Tuesday	235	264	0.17	23.04	19.16	42.37	33.86
07/11/18 Wednesday	178	169	0.09	14.01	21.79	35.89	61.95
07/12/18 Thursday	147	160	0.03	21.59	17.50	39.12	22.73
07/13/18 Friday	169	208	0.41	23.09	14.52	38.02	17.30
07/14/18 Saturday	267	285	1.23	15.58	23.73	40.54	7.76
07/15/18 Sunday	-	-	-	-	-	-	-
07/16/18 Monday	-	-	-	-	-	-	-
07/17/18 Tuesday	215	237	0.14	23.08	21.52	44.74	73.99
07/18/18 Wednesday	158	201	0.08	30.33	15.08	45.49	247.09
07/19/18 Thursday	181	186	0.35	33.12	11.77	45.24	270.30
07/20/18 Friday	173	225	0.06	19.35	18.02	37.43	132.54
07/21/18 Saturday	270	325	0.49	10.66	18.51	29.66	291.43
07/22/18 Sunday	-	-	-	-	-	-	-
07/23/18 Monday	-	-	-	-	-	-	-
07/24/18 Tuesday	108	101	0.07	7.31	10.79	18.17	14.71
07/25/18 Wednesday	132	130	0.13	23.62	17.58	41.33	30.10
07/26/18 Thursday	138	197	0.20	25.20	13.59	38.99	5.65
07/27/18 Friday	168	183	0.14	41.26	19.38	60.78	20.15
07/28/18 Saturday	238	278	0.30	38.08	14.75	53.13	3.02
07/29/18 Sunday	-	-	-	-	-	-	-
07/30/18 Monday	-	-	-	-	-	-	-
07/31/18 Tuesday	-	-	-	-	-	-	-
Total	3,689	4,200	4.90	429.79	342.96	777.65	1,302.15
Average	176	200	0.23	20.47	16.33	37.03	62.01
Median	178	203	0.14	23.08	17.58	40.54	22.61
Maximum	312	412	1.23	41.26	26.44	60.78	291.43
Minimum	108	101	0.03	7.31	10.79	18.17	3.02

Material Type & Description

Citizen-Can: Roll-off container at the Ivy MUC Convenience Center-citizens dispose of prepaid trashbags

Construction: Construction/demolition debris (shingles, sheetrock, treated lumber, etc.)

Count: Transactions per item (appliances, hauling fees, service fees, tag-bag stickers, tires)

Domestic: Business/residential general or household waste

MSW: Materials processed/handled at the Transfer Station

Non-MSW: Materials processed/handled on-site

Vehicle: Transactions or vehicles processed in a day



MEMORANDUM

**TO: RIVANNA SOLID WASTE AUTHORITY
BOARD OF DIRECTORS**

FROM: PHIL MCKALIPS, DIRECTOR OF SOLID WASTE

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: IVY LANDFILL ENVIRONMENTAL STATUS UPDATE

DATE: AUGUST 28, 2018

Corrective Action Plan (CAP)

The Ivy MUC continues to maintain compliance with VA DEQ regulations and our approved Corrective Action Plan.

On March 14, 2017, VA DEQ provided their Second Technical Review of the revised Corrective Action Plan. In summary, the Department's comments were generally minor administrative corrections or requests for further detail on specific portions of the Corrective Action Plan. Our response to these comments was provided to the Department by the June 12, 2017 deadline. VA DEQ has not provided further comments on the revised Corrective Action Plan or a schedule as to when further comments or an approved Corrective Action Plan may be expected.

This revised Corrective Action Plan was originally submitted in July 2013 and incorporates revised groundwater sampling and reporting requirements. While awaiting finalization, the Department has authorized the Authority to utilize the revised sampling and reporting requirements.

Paint Pit Interim Measure (Soil-Vapor Extraction System)

The Soil-Vapor Extraction (SVE) System has been having control panel electrical issues and is undergoing renovation and repairs. These are expected to be completed toward the end of this summer. The SVE System is 10 years old and is located outside and exposed to relatively harsh environmental conditions. Electrical issues have begun to increase and in response, staff has determined that a major renovation of the control panel and electrical system is needed to return it to reliable duty.

Surface Water

The Spring 2018 surface water survey and monitoring program has been completed. The surface water sampling and visual survey did not identify any anomalies. Data from the visual survey and analysis of samples will be included in a tri-annual Corrective Action Site Evaluation (CASE) report to be submitted to VA DEQ in the Fall of 2018.

Non-CAP Groundwater Monitoring

The Spring 2018 sampling event has been completed, with no anomalies identified. The results of the analysis of groundwater samples will be documented in a report to VA DEQ by August 2018. These groundwater monitoring activities are being completed in accordance with the requirements of our DEQ Permit and the 2000 settlement agreement with the landfill neighbors.

Cell 3 and Leachate Collection and Treatment System

The horizontal drain system to the landfill gas collection system continues to be throttled to maintain proper balance of the system's pressures and flows. Documentation summarizing the activities related to Cell 3 will be submitted to VA DEQ in the 2018 tri-annual Site-wide CASE report.



MEMORANDUM

**TO: RIVANNA SOLID WASTE AUTHORITY
BOARD OF DIRECTORS**

**FROM: MICHELLE SIMPSON, SENIOR CIVIL ENGINEER
PHIL McKALIPS, ENVIRONMENTAL AND SAFETY MANAGER**

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: STATUS REPORT: ONGOING PROJECTS

DATE: AUGUST 28, 2018

This memorandum reports on the status of the following Capital Projects at the IMUC:

1. New Solid Waste Transfer Station

Design Engineer:	SCS Engineers
Construction Contractor:	Lantz Construction Company
Construction Start:	September 2017
Percent Complete:	90%
Base Construction Contract +	
Change Orders to Date = Current Value:	\$2,211,000+\$36,597.00=\$2,247,597
Expected Completion Date:	September 2018
Total Capital Project Budget:	\$3,061,367

Current Status:

The contractor has completed construction of the metal building and tipping floor, installation of storm sewer and utilities, and most of the pavement. Conversion of the sediment ponds to sand filters, final grading and seeding, and fencing is in process. Demolition of the existing transfer station must also be completed. A public ribbon cutting ceremony was held on August 23, 2018. The grand opening will occur after DEQ issues the Certificate to Operate, which is anticipated in early September.

History:

Following a November 2015 Albemarle County Board of Supervisors' decision to replace the existing solid waste transfer station with a new facility, the Rivanna Solid Waste Authority Board of Directors authorized the design of the new transfer station by SCS Engineering. The new 11,600 square foot concrete and steel frame transfer station is designed to meet all current regulatory requirements for solid waste handling, maximize use of the existing infrastructure, improve traffic flow, and potentially expand recycling services while retaining existing waste disposal services. The new facility will

be located on the western portion of the existing Ivy Material Utilization Center (Ivy MUC) site and will continue to use the existing entrance and scales. The existing transfer facility and compactor system will remain in service until the new transfer station is placed into service, at which time the existing facility will be decommissioned and removed.

SCS Engineers completed the design of the New Ivy Solid Waste Transfer Station and the project was advertised for bids (RFB No. 335) on July 2, 2017. Construction bids for the project were opened on August 3, 2017, and eight competitive bids were received ranging from \$2,211,000 to \$3,151,400. After reviewing the bid documents, SCS Engineering recommended award of the contract to the apparent low bidder, Lantz Construction Company.

2. Enclosed Landfill Gas Flare

Design Engineer:	Resource International
Construction Contractor:	SCS Field Services
Construction Start:	March 2018
Percent Complete:	95%
Base Construction Contract + Change Orders to Date = Current Value:	\$369,911
Expected Completion Date:	August 2018
Total Capital Project Budget:	\$450,000

Current Status:

The new flare was delivered and installed at the end of July 2018. Startup and testing occurred at the beginning of August and the flare is in service, however, the contractor is still working out a few programming issues with the manufacturer.

History:

Installed in 1999, the existing landfill gas flare has operated almost continuously, destroying methane and odor-causing components of the landfill gas. The flare was designed to destroy landfill gases at a temperature of 1600 °F at a range in flow from 1500 cubic feet per minute (cfm) to approximately 200 to 300 cfm. Due to normal reductions in waste decomposition over time, landfill gas flows have fallen to the lower end of the existing flare's operating range.

With RSWA BOD approval in June 2016, RSWA executed a work authorization with Resource International, Ltd for the engineering services required to evaluate, design, and develop bid specifications for the replacement of the existing landfill gas flare with one that will be appropriately sized for the current and future methane flows. This item was included in the capital budget.

3. Ivy Master Plan

Consultant:	Arcadis U.S., Inc.
Project Start:	May 2018
Project Status:	35% Complete
Completion:	November 2018
Total Contract Cost:	\$42,560

Current Status:

The consultant is continuing to work towards completing the Master Plan for the Ivy site. The plan will be presented to the Board at the November Board Meeting. As an interim deliverable, Arcadis has prepared two alternative preliminary designs of a convenience center at the Ivy MUC. These alternative designs will be presented to the Board of Directors for comments.

History:

Over the past few years, multiple changes have been considered and/or implemented at the Ivy Material Utilization Center (IMUC). The New Ivy Transfer Station is currently under construction and will be opened this fall. Food waste composting has been implemented and a major solar energy project was considered, although not moving forward at this time. The County has inquired about enhancing the recycling services at Ivy MUC to include a convenience center, similar to McIntire Recycling Center. With all of these various developments, staff and the Board decided it would be beneficial to embark on a master planning process.

This project will include development of a Master Plan for a recycling convenience center at the IMUC. The project will begin with the collection of existing Authority data on current recycling activities and materials, and then compare our services to other similar size communities. The consultant will evaluate proposed services, and provide alternative site layouts and preliminary construction costs for improvements.



MEMORANDUM

**TO: RIVANNA SOLID WASTE AUTHORITY
BOARD OF DIRECTORS**

FROM: PHIL MCKALIPS, DIRECTOR OF SOLID WASTE

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

**SUBJECT: IVY MUC MASTER PLAN – CONVENIENCE CENTER LAYOUT
ALTERNATIVES**

DATE: AUGUST 28, 2018

Background

At the February 2018 Board Meeting, the development of a Master Plan for the Ivy MUC site by Arcadis was approved. This Master Plan project has been undertaken to develop a defined plan for the use of the Ivy MUC property and the nature of waste management, recycling, and other activities that the site could support. The first phase of this project was to develop two alternative preliminary designs for a recycling convenience center at the Ivy MUC. With Board input and approval, the selected convenience center design will be incorporated into the Ivy MUC Master Plan. In order to maximize efficiencies and provide a continuity of service, the recyclables that are expected to be collected at the Ivy MUC convenience center will be the same as those collected at the McIntire Recycling Center.

Proposed Alternatives

As shown on the attached figures (and provided in the Board Meeting Presentation), two alternative convenience center locations and layouts have been provided (see Figure 1 and Figure 2).

Alternative 1 – Existing Transfer Station Location

The first of these alternatives is based on a development that occupies the soon to be closed transfer station location (see Figure 1). This alternative establishes a facility that utilizes the existing loading dock of the existing transfer station to create a customer walkway with recyclable material collection container located to the left and right as the customer walks down the central walkway. In this design, materials that will utilize top-loading compactor containers will be located to the right (south-side) of the walkway, so that patrons do not have to move around the compactor motor, compressor, power pack assemblies as they do at the existing McIntire facility.

PROS of this alternative are:

- By placing containers on each side of the walkway, patrons and operating staff will have shorter distance and sight-lines between containers.
- This location maintains certain ease of vehicle considerations by keeping traffic separate from that requiring use of the site scales.
- The majority of Site vehicle traffic is kept separate from convenience center patron traffic.
- Does not significantly interfere with currently established traffic patterns for Household Hazardous Waste (HHW) and other Amnesty Days.
- Makes good use of this already-developed part of the Site.

CONS of this alternative consist of:

- More limited potential for future expansion.
- Contains two-way customer traffic patterns.
- Will require interaction between periodic movement of waste hauling trailers coming from the new transfer station and convenience center patrons.

Alternative 2 – Transfer Trailer Parking Area Location

The second alternative will establish a separate facility to be located at the east end of the existing paved area, currently where waste transfer trailers are stored (in the area of the closed Asbestos Disposal Area). In this alternative, the recyclables collection containers will all be at grade, and access to the containers will be like that at McIntire (*i.e.*, a linear parking area with an adjacent line of collection containers and compactors).

PROS for this alternative:

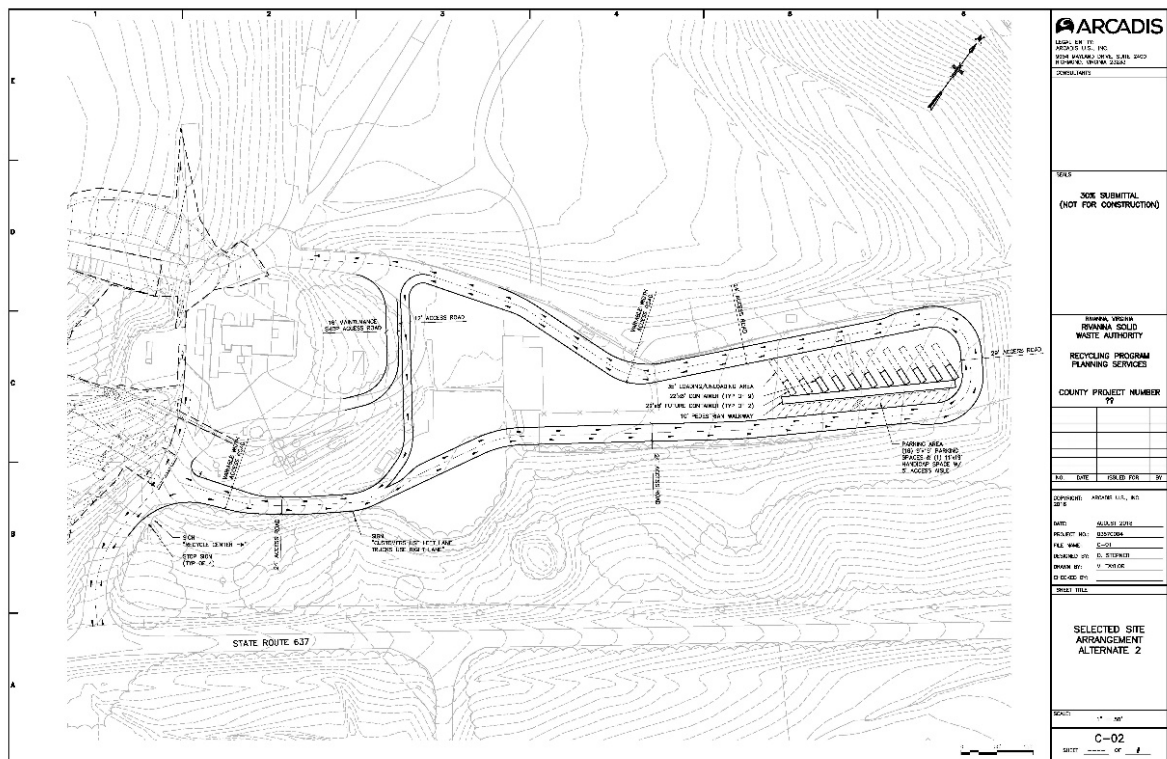
- Significant room for future expansion to the west.
- Provides longer access road, inbound queuing of traffic on access road.
- All traffic is one-way.
- Eliminates areas of two-way traffic.

CONS of this alternative:

- Creates more interaction between Site vehicles and patrons.
- Interferes with established traffic and queuing patterns for HHW and other Amnesty Days.
- Effectively isolates parts of the existing Site from convenient use for ongoing programs.

Board Action Requested

In order to complete the development of a complete Master Plan for the Ivy MUC, RSWA staff is requesting comments and feedback on the two-proposed alternative convenience center layouts so that one preferred alternative can be identified and incorporated into the final Master Plan for the Ivy MUC Site. RSWA staff's preferred design is based on Alternative 1 as it creates minimal interruption with other site programs (*e.g.*, HHW and Amnesty Day collections). This location also contains a great deal of existing infrastructure (*e.g.*, electricity) that will be needed to install the needed compactors. This location also allows the greatest amount of

[illegible]

MEMO

To:

Phillip D. McKalips, Rivanna Solid
Waste Authority

Copies:

Joseph Krupa, Arcadis
Daniel Stepner, Arcadis

Arcadis U.S., Inc.
11350 Random Hills Road
Suites 861 & 862
Fairfax
Virginia 22030
Tel 703 351 9100
Fax 703 351 1305

From:

Doug Sawyers, Arcadis

Date:

August 21, 2018

Arcadis Project No.:

03570004.0000

Subject:

Recycling Program Planning Services:
Ivy MUC Recycling Center Alternatives

Introduction

The purpose of this memorandum is to provide two (2) conceptual level designs for a recycling convenience center at the Ivy Materials Utilization Center (Ivy MUC). The design consists of a generalized plan layout, including access and egress roads and interior traffic patterns. It is assumed that equipment will be positioned at-grade to minimize construction requirements.

Background

The Rivanna Solid Waste Authority (Authority) facilitates solid waste management services for residents and businesses within Albemarle County (County) and the City of Charlottesville, Virginia (City). These services currently include the management and disposal of recyclable material, solid waste, household hazardous waste and bulky waste. The Authority's facilities include the McIntire Recycling Center, the Meade Avenue Paper Sort Facility and the Ivy MUC Transfer Station (currently under construction).

Each Spring and Fall, the Authority sponsors Household Hazardous Waste (HHW) and Bulky Waste Amnesty Days at the Ivy MUC for County, City, and Town of Scottsville residents to drop off HHW and bulky waste free of charge.

The Ivy MUC is located on the former site of the closed Ivy Landfill at 4576 Dick Woods Road, Charlottesville, VA 22903. The Ivy MUC includes a municipal solid waste (MSW) and construction and demolition debris (C&D) material transfer station; a vegetative waste mulching operation; a convenience drop-off center for accepted recyclables; household hazardous waste collection: collection for white goods, pallets, and tires; and the Encore shop for collection and sale of reusable items. Acceptable recyclable materials at the Ivy MUC at no charge currently include the following:

- Cardboard
- Newspaper and magazines
- Motor oil
- Antifreeze.

Paint cans (latex and oil-based) are also collected, but not recycled. The Authority also accepts residents' compostable food waste in compostable bags and MSW in 32-gallon trash bags with applicable trash stickers. MSW brought to the Transfer Station is charged a fee of \$66.00 plus a \$1.00 service fee for County residents and \$66.00 plus a \$10.00 service fee for non-County residents. Wood waste brought to the Ivy MUC is ground into mulch for sale to the public. The Authority also sponsors HHW and Bulky Waste Amnesty Days at the Ivy MUC for County, City, and Town of Scottsville residents to drop of HHW and bulky waste free of charge.

The Ivy MUC operates Tuesday through Friday from 7:30 am to 4:00 pm and on Saturday from 8:30 am to 4:00 pm. The Ivy MUC is closed on Sundays and Mondays and designated holidays.

Description of Proposed Facility

Based on the recommendations of the Authority, the proposed drop-off convenience center will be located at either the Ivy MUC loading dock, located to the east of the Maintenance Shop and Encore Shop, or at the transfer trailer storage lot to the east of loading dock. The Ivy MUC loading dock is presently developed or utilized as a drop-off center for newspaper, magazines and cardboard at the loading dock and wooded, vegetated area between the loading dock and the Encore Shop. As the name suggests, the transfer trailer storage lot is presently utilized as a storage area for transfer trailers.

The proposed convenience center will accept the following materials in designated bins or containers:

- Mixed metal containers (e.g., steel cans, aluminum foil)
- Aluminum beverage cans
- Plastic bottles and containers (e.g., coded 1-7 rigid plastic bottles and containers)
- Glass food and beverage containers
- Plastic bags and wraps (clean and dry)
- Old corrugated cardboard (OCC)
- Office paper (e.g., file stock)
- Newspaper and magazines
- Mixed paper (e.g., brown paper)
- Telephone books

Assumptions

The following assumptions have been used in the development of the plans that are presented in this Memorandum:

- Materials handled at this Facility will be recyclable materials and incidental solid waste materials that may be inadvertently placed in with the recyclables at the point of waste generation.
- Recyclable materials will be source separated and placed into up to twelve containers or bins, including a bin for each material plus extra space for future expansion.
- Container and bin dimensions are at maximum 22 feet long by eight feet wide.
- A minimum of 35 feet will be provided to access containers and bins for loading and unloading operations.
- Patron walkways are 10 feet wide.
- The patron passenger vehicle area will be separate from the maneuvering space of transfer trailers.
- On-site roadway width for lane of travel is 15 feet and minimum shoulder width is five feet.
- Vehicle turning paths are based on American Association of State Highway and Transportation Office (AASHTO) standard vehicles P (Passenger), SU (single unit), and WB 67 (Truck tractor and 53-foot-long trailer).

Site Arrangement Alternate 1

The site of the proposed facility for Alternate 1 will utilize both the loading dock and a portion of the vegetated area to the west of the loading dock. To fully utilize the space of the loading dock, and to minimize the amount of grading and site transformation, this layout proposes to place up to six bins or containers perpendicular to both the upper and lower levels of the loading dock. A walking path is proposed on the upper level at the edge of the loading dock for patrons to walk back and forth to access each material bin or container. On the upper level, adequate walking paths will be provided between each bin. On the lower level, containers or bins will be either open-topped, or equipped with top-feeding hoppers, allowing patrons to toss their recyclables from the edge of the upper level of the loading dock. Patrons would not require access to the lower level of the loading dock.

The primary feature of the convenience center layout is a separation of passenger vehicle and transfer trailer traffic. Both passenger vehicles and transfer trailers will access the convenience center by making an immediate right upon entering the Ivy MUC. However, once vehicles reach the convenience center, passenger vehicles will bear left to access the convenience center parking area, while transfer trailers will bear right to travel an extended loop around the convenience center that will provide loading and unloading access to the containers and bins and access to the transfer trailer storage lot. The convenience center parking area consists of a single row of pull-in/pull-out parking adjacent to the upper level of the loading dock. Customers will exit the parking area along the same two-lane road they travelled to enter the parking area, diverting recycling customer traffic away from the scales. The layout proposes shifting the access road to the Maintenance Shop to the west of the parking area. A conceptual site plan of Alternate 1 is provided in Figure 1.

Site Arrangement Alternate 2

The site of the proposed facility for Alternate 2 will utilize the eastern portion of the transfer trailer storage area. The layout proposes containers aligned diagonally with adequate walking paths between each bin or container for patrons to walk back and forth to access each material bin or container. Eleven containers are shown.

Alternate 2 features an access road with two driving lanes that circles around the convenience center in a counter-clockwise direction. Both passenger vehicles and transfer trailers will access the convenience center by making an immediate right upon entering the Ivy MUC. The inner lane is to be designated for passenger vehicles, while the outer lane is to be designated for transfer trailer traffic. Once vehicles reach the convenience center, passenger vehicles in the inner lane may park in a single row of pull-in/pull-out parking south of the bins or containers. Transfer trailers in the outer lane can continue around the access road to the north side of the bins or containers, where they can access the bins or containers for loading and unloading operations. Transfer trailers can also continue past the convenience center where they store trailers in the open area to the west of the convenience center. The layout also proposes creating a single lane of traffic to the west of the loading dock for passenger vehicles to exit the site, diverting recycling customer traffic away from the scales, and shifting the access road to the Maintenance Shop to the west of the exit road. A conceptual site plan of Site Arrangement Alternate 2 is provided in Figure 2.

Advantages and Disadvantages of Site Alternatives

The layouts for both Alternates 1 and 2 provide advantages and disadvantages. The layouts were evaluated based on the following key criteria:

- Ease of vehicle movement throughout the site;
- Separation of vehicle types;
- Inbound queuing space prior to the convenience center;
- Minimize impact of site operation on adjacent properties; and
- Options for future expansion.

Advantages

Both site layouts provide access to the convenience center separate from the Transfer Station and scales and backing access for loading and unloading of the bins and containers. Both layouts also provide for queuing of inbound vehicles along the site access road.

The main advantage to Alternate 1 is a clear separation between passenger vehicles and transfer trailer traffic. Once passenger vehicles turn into the convenience center, they are separated from other site activities. There is minimal opportunity for interaction between transfer trailers and pedestrians during bin or container loading and unloading operations. Another advantage to Alternate 1 is that construction activities will be limited to the loading dock area and will not impact the transfer trailer storage area.

An advantage of Alternate 2 is that traffic is directed in a one-way circular loop around the convenience center. Alternate 2 also provides more flexibility for future expansion. Although only two spaces are shown in the site plan below for expansion of additional bins or containers, additional containers can add to the west of the bins shown, as future needs may require.

Disadvantages

A disadvantage of both alternate layouts is that passenger vehicles share a portion of the access road with transfer trailers. This is more significant with Alternate 2, in which the entire access road is shared, as opposed to Alternate 1, which is only shared just as the vehicles enter the Ivy MUC, before they turn off to access the convenience center. Construction of both layouts will also impact access to the Maintenance Shop: the new access road is required to be constructed to the west of the loading dock area to maintain the current level of access to this facility.

A primary disadvantage of Alternate 1 is that vehicles are directed to the parking area through a two-way traffic pattern. This two-way traffic may also impact queuing of inbound vehicles. In addition, there is limited space available for future expansion.

The disadvantage of Alternate 2 is the sharing of the access road between transfer trailers and pedestrian vehicles. While there is a clear separation of travel lanes, a parking area for passenger vehicles, and the loading and unloading of bins and containers is the opposite side of the site from pedestrian walkways, pedestrians may still be impacted if operations are performed during time that is open to the public. A summary of advantages and disadvantages of Alternates 1 and 2 is provided in Table 1.

Summary

Selection of the final site layout will be made by the Authority after review of this Memorandum and the site layouts and evaluations included herein. Arcadis is looking forward to scheduling a conference call with the Authority to review and discuss the selected alternative's layout. Once the selection is made, the selected layout will be included in a Master Plan Report to be submitted to the Authority.

Table 1. Advantages and Disadvantages of Proposed Alternates

Evaluation Attribute		Alternate 1 Loading Dock	Alternate 2 Transfer Trailer Storage Area
Advantages	a. Ease of vehicle movement throughout the site	<ul style="list-style-type: none"> • Site access is separate from Transfer Station and scales • Backing movement is provided for loading/ unloading of bins/containers 	<ul style="list-style-type: none"> • Site access is separate from Transfer Station and scales • Backing movement is provided for loading/ unloading of bins/containers • One-way vehicle circulation for patrons and transfer trailers
	b. Separation of vehicle types	<ul style="list-style-type: none"> • Passenger vehicles are separated from transfer trailers at convenience center • Loading and unloading of bins/containers is separate from pedestrian walkways 	<ul style="list-style-type: none"> • Dedicated travel lanes are provided for recycling customers and commercial traffic • Loading and unloading of bins/containers is separate from pedestrian walkways
	c. Inbound queuing space prior to convenience center	<ul style="list-style-type: none"> • Inbound queuing space provided along access road 	<ul style="list-style-type: none"> • More inbound queuing space provided along access road, including back to barn and past loading dock area
	d. Minimize impact of site operation on adjacent properties	<ul style="list-style-type: none"> • Construction is limited to loading dock area 	<ul style="list-style-type: none"> • N/A
	e. Future Expansion	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Can be expanded to the west for future expansion
Disadvantages	a. Ease of vehicle movement	<ul style="list-style-type: none"> • Two-way traffic for passenger vehicles 	<ul style="list-style-type: none"> • N/A
	b. Separation of vehicle types	<ul style="list-style-type: none"> • Passenger vehicles share access road with transfer trailers at convenience center approach only • Operational controls are required to maintain safety when bins are changed out while customers on site 	<ul style="list-style-type: none"> • Passenger vehicles share access road with transfer trailers for full access road • Operational controls are required to maintain safety when bins are changed out while customers on site
	c. Inbound queuing space prior to convenience center	<ul style="list-style-type: none"> • Two-way traffic in parking area may impact inbound queuing, potentially impacting access to the transfer trailer storage area 	<ul style="list-style-type: none"> • N/A
	d. Minimize impact of site operation on adjacent properties	<ul style="list-style-type: none"> • Temporary impact access to Maintenance Shop 	<ul style="list-style-type: none"> • Temporary impact access to Maintenance Shop • Construction impacts both loading dock and trailer storage areas
	e. Future Expansion	<ul style="list-style-type: none"> • Future expansion is limited 	<ul style="list-style-type: none"> • N/A

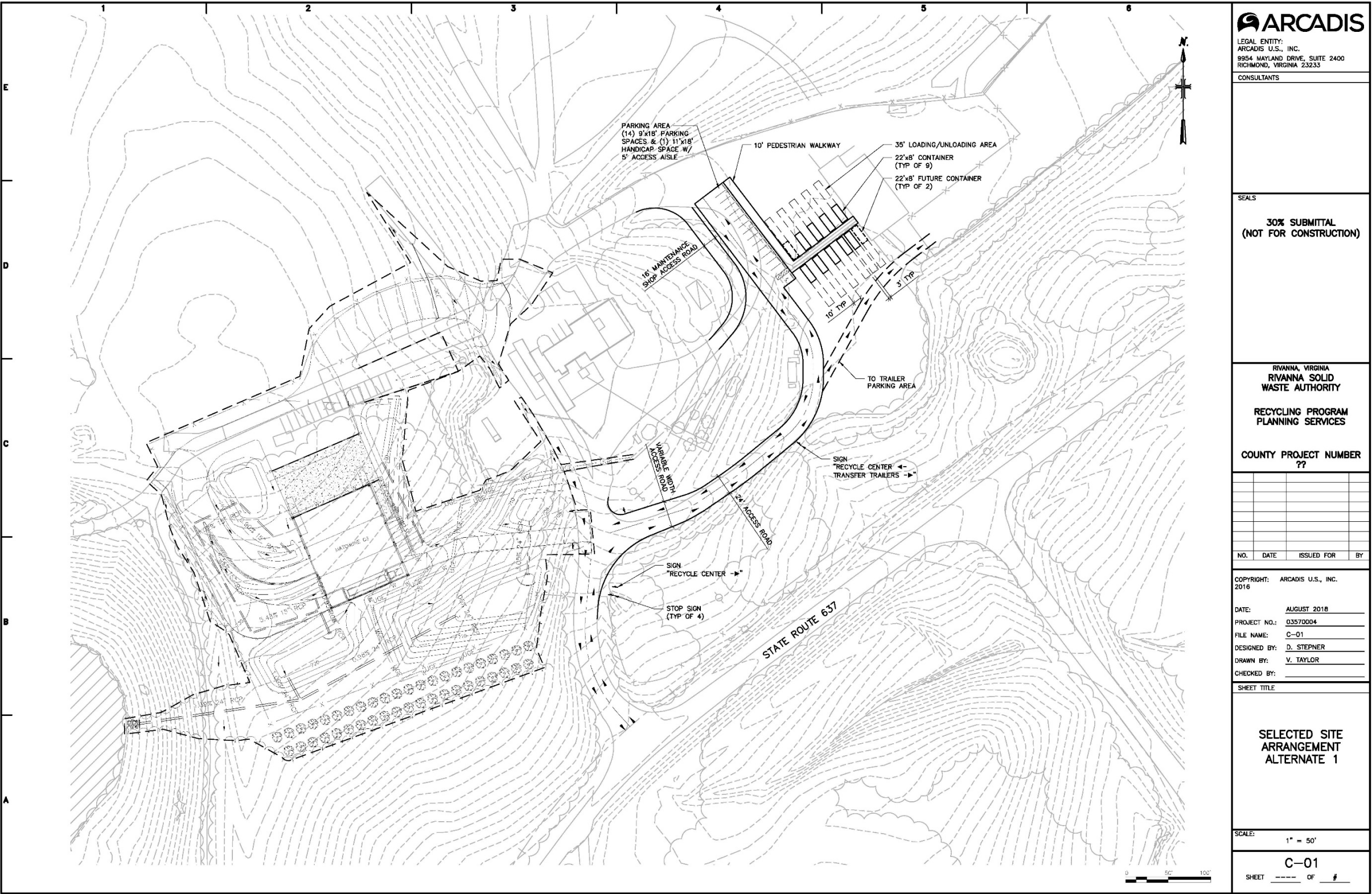


Figure 1. Site Arrangement Alternate 1

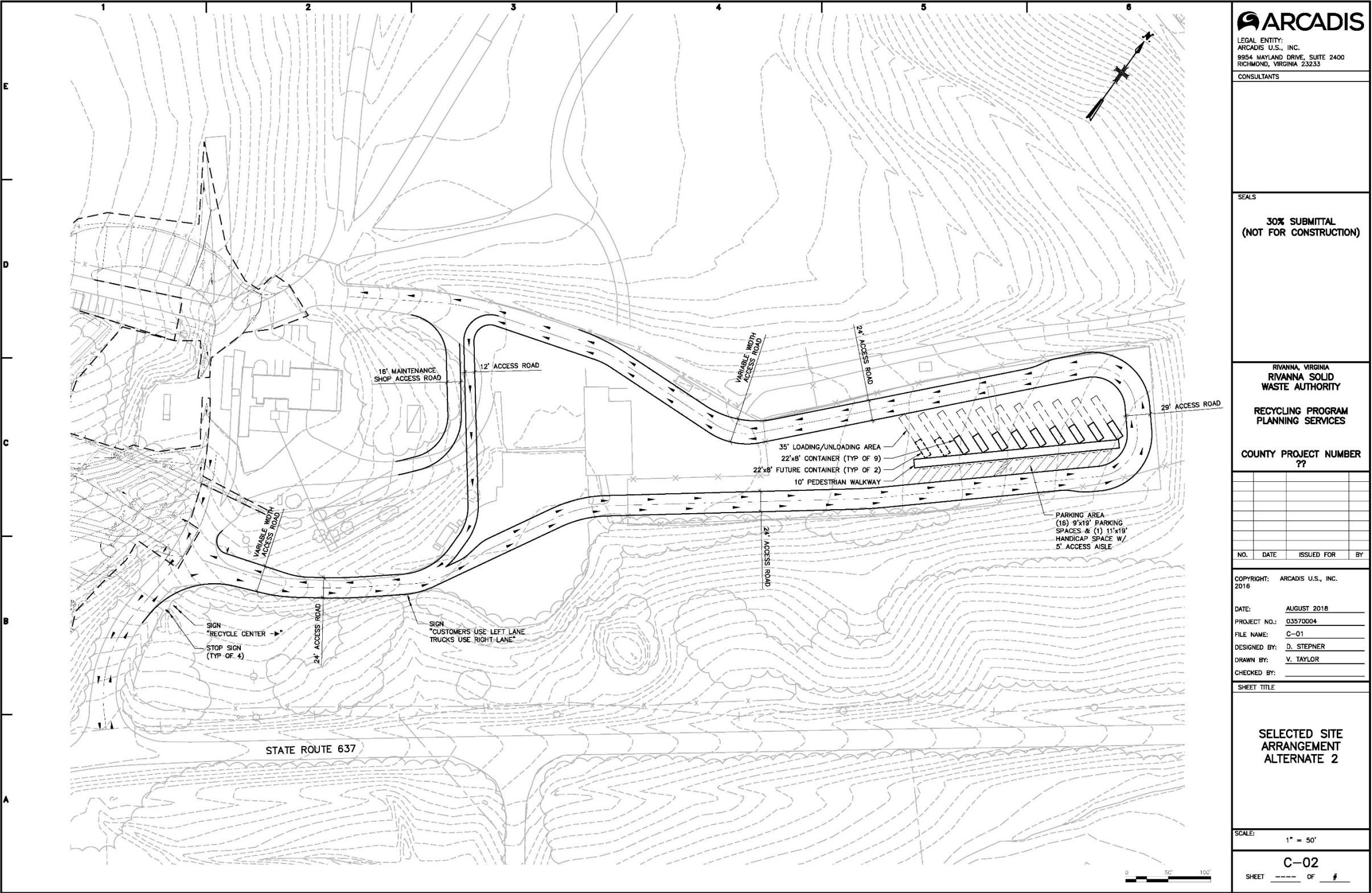


Figure 2. Site Arrangement Alternate 2

Ivy MUC Convenience Center Alternatives

Presented by Phil McKalips
August 28, 2018



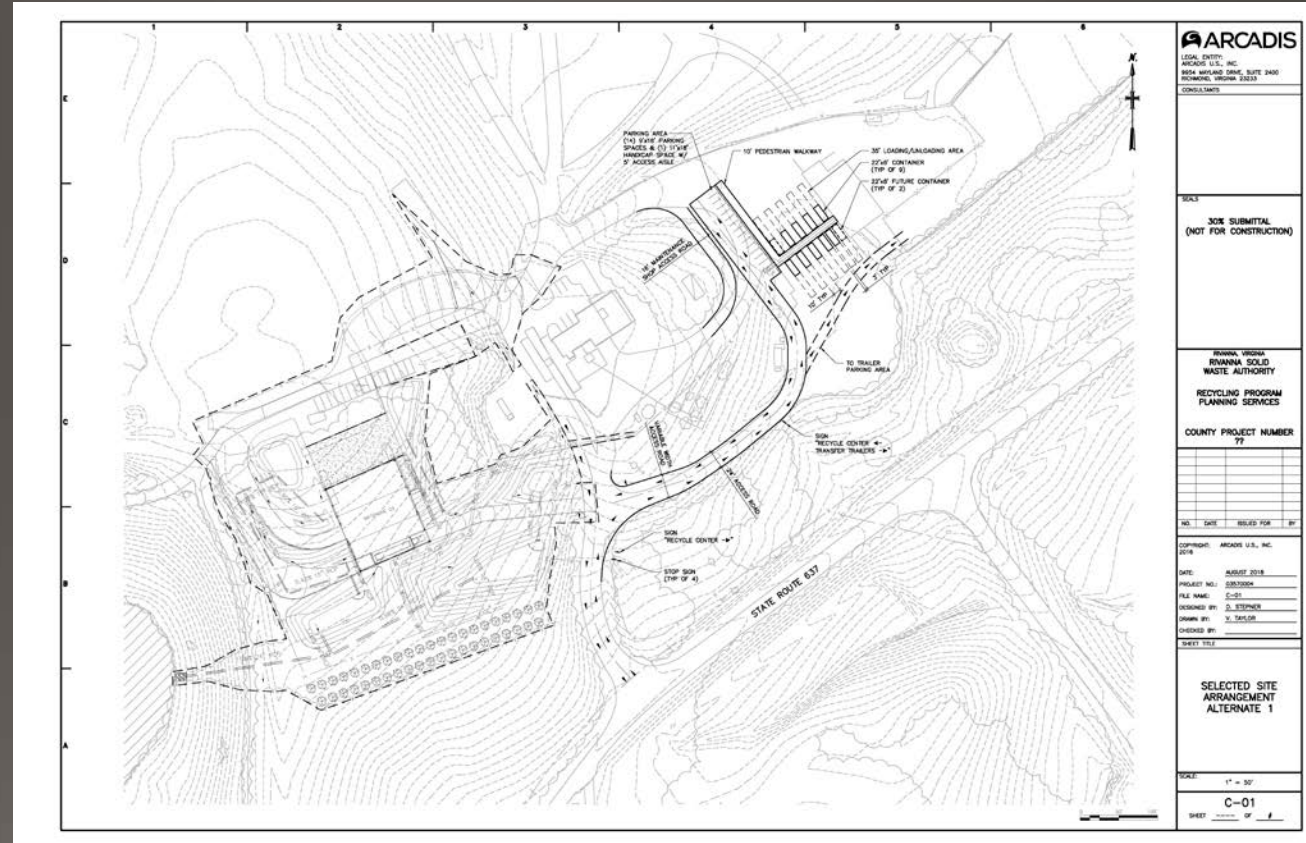
Alternative 1 – Old TS Location

Pros:

- More compact, utilizes Old Transfer Station space.
- Does not interfere with Amnesty Day traffic.

Cons:

- Less space for expansion
- Design creates two-way traffic for customers



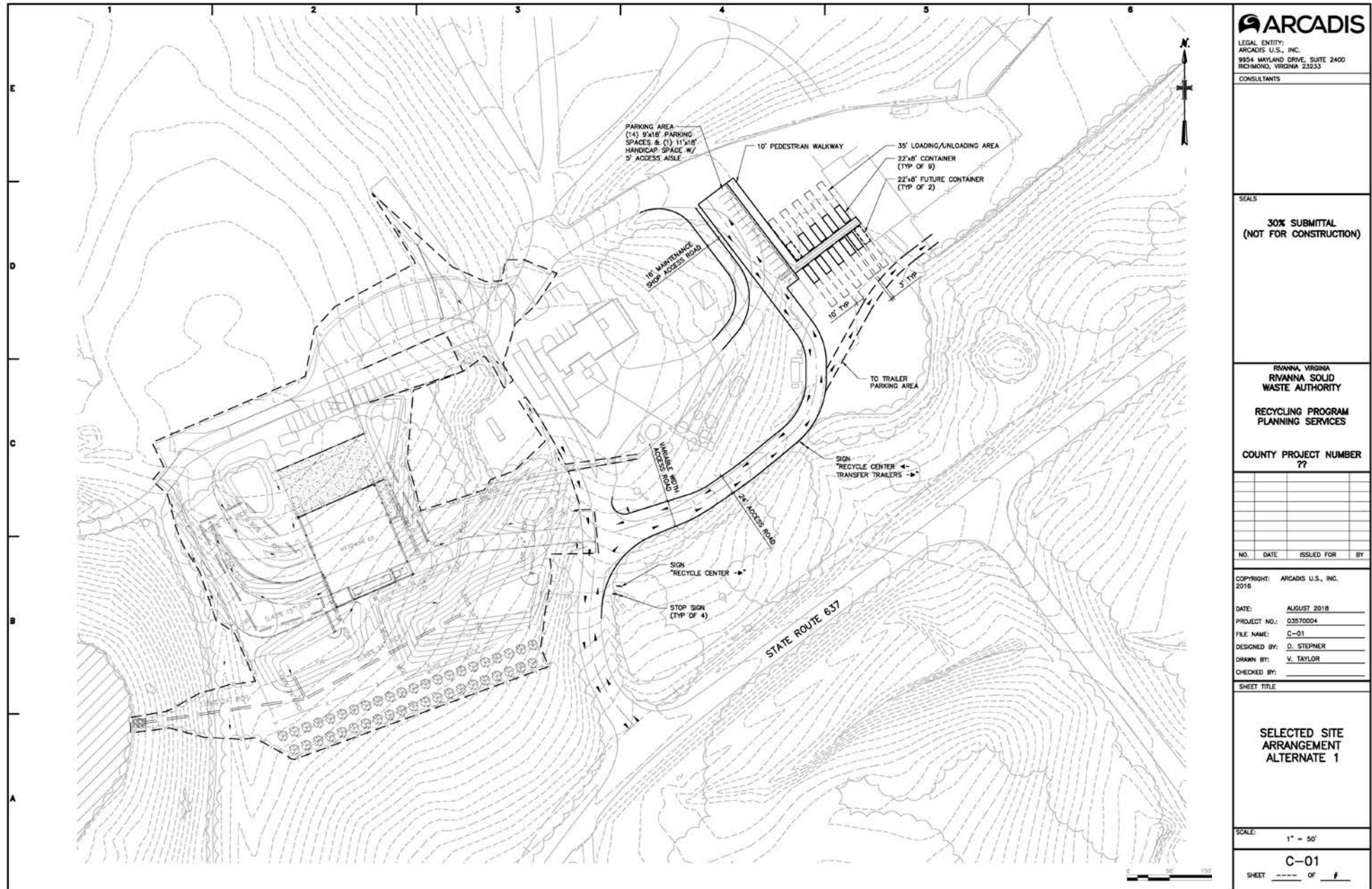
Pros:

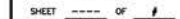
- ## Cons:

- Creates more interaction between site vehicles and patrons
- Interferes with existing HHW and Amnesty traffic patterns



Alternative 1



[illegible]



STRATEGIC PLAN QUARTERLY UPDATE

3rd Quarter – 2018

Report to the Board of Directors
August 28, 2018

RIVANNA
WATER AND SEWER AUTHORITY
& SOLID WASTE AUTHORITY

Goal Team Composition

Goal	Champion
Communications	Katie McIlwee
Environmental Stewardship	Andrea Terry
Solid Waste Services	Phil McKalips
Workforce Development	Betsy Nemeth / Lonnie Wood
Infrastructure	Scott Schiller
Operational Optimization	Tim Castillo / David Tungate

Goal Team Work: Tactic Development



Strategies

1. Workforce Development

- A. Develop a comprehensive staffing, classification, & compensation plan
- B. Conduct a training needs assessment & enhance the training program

2. Operational Optimization

- A. Continually evaluate, prioritize, & improve key business & operational processes
- B. Protect our workforce & the public through continually growing a culture of safety

3. Communication & Collaboration

- A. Create & maintain internal communication platforms
- B. Create & implement a comprehensive public outreach plan

4. Environmental Stewardship

- A. Increase internal environmental engagement
- B. Designate resources to support environmental outreach & green initiatives

5. Solid Waste Services

- A. Determine community needs & preferred service levels
- B. Enhance partnerships with local governments & the University of Virginia

6. Infrastructure & Master Planning

- A. Implement an Authority-wide asset management program
- B. Develop & maintain long-term master plans for all critical asset classes

By the Numbers

Overall plan completion: 32%

By Goal:

- | | |
|------------------------------------|-----|
| • Workforce Development | 38% |
| • Operational Optimization | 31% |
| • Communication & Collaboration | 20% |
| • Environmental Stewardship | 37% |
| • Solid Waste Services | 25% |
| • Infrastructure & Master Planning | 43% |

Recent Activity

1. Workforce Development

- A. New pay scales implemented on 7-1-18
- B. Completed PVCC Leadership Training on 6-5-18

2. Operational Optimization

- A. Completed Authority wide safety survey
- B. Upgraded routers to improve cyber security
- C. Gas collection improvement: Digester #1 sealing complete and Digester #2 underway

3. Communication & Collaboration

- A. Draft Records Management Policy has been completed
- B. Development of an Employee Portal is underway

4. Environmental Stewardship

- A. Created a standing Employee Environmental Committee
- B. Documented existing environmentally-friendly activities within each department

5. Solid Waste Services

- A. List of partnership organizations, and POCs, developed
- B. Defined Authority's existing services and practices

6. Infrastructure & Master Planning

- A. Developed and advertised Asset Management Plan RFP
- B. Began identifying need for additional Master Plans, such as Finished Water Master Plan, IT Master Plan, and OWTP & SRWTP Property Needs Assessment

Next Steps

1. Workforce Development

- A. Finalize Master Staffing Plan and review with Board
- B. Develop Leadership Development Training for future leaders

2. Operational Optimization

- A. Meet with new Safety Manager to review results of survey to develop workplan for improvement
- B. Complete sealing of Digester #2

3. Communication & Collaboration

- A. Conduct departmental records survey to complete records management and file creation policies
- B. Complete Employee Portal to increase internal communication
- C. Develop Communications Policy

4. Environmental Stewardship

- A. Coordinate with Comms. & Collaboration to disseminate information on on-going environmental activities
- B. Identify and plan for activities/projects to engage employees
- C. Coordinate with Workforce Devel. for Employee Environmental Committee staffing needs

5. Solid Waste Services

- A. Craft a messaging strategy for RSWA and its services
- B. Communicate existing services to public and partner organizations

6. Infrastructure & Master Planning

- A. Finalize Asset Management Committee and prepare for kick-off meeting with consultant
- B. Continue to organize asset information and complete the effort as part of the Asset Management Plan development process



QUESTIONS?

Workforce Development Tactics

Develop a comprehensive staffing, classification, & compensation plan

- Implement approved pay grade schedule - July 1
- Develop Master Staffing Plan
- Review staffing plans with BOD, gain approval (CONCEPTUALLY) of plan, formal approval will occur in budget approval for next fiscal year's new positions
- Continued annual review of staffing needs at an executive level

Conduct a training needs assessment & enhance the training program

- 12 month training calendar
- PVCC Leadership Training
- Employee Development Plans
- New Employee Training - scheduling, comm., trainers, ON-BOARDING specific to positions
- Training communication and scheduling

Operational Optimization Tactics

Continually evaluate, prioritize, & improve key business & operational processes

- Inventory and prioritize critical business and operational processes
- Identify key performance indicators for each department
- Research appropriate benchmarks/best practices
- Select one key business or operational process to improve as a pilot
- Create training to support efficiency and effectiveness improvements

Protect our workforce & the public through continually growing a culture of safety

- Identify and prioritize 10 safety concerns in each department regarding design engineering, operations, and preventative maintenance
- Research successful public-sector safety programs, including health and safety audits for project design
- Develop and communicate guidance for safety incident reporting, near misses, and suggestions
- Monitor and evaluate the outcomes from the vulnerability assessment
- Develop recommendations to improve cyber security

Communication & Collaboration Tactics

Create & maintain internal communication platforms

- Inventory current internal communications efforts and ensure all employees have equal access to internal communications
- Collaborate with Employee Council
- Create internal communication “trees” for specific types of information (e.g. safety, emergency information, on-boarding/off-boarding, etc.)
- Research and develop a digital communications protocol"
- Review SOPs for job duties
- Standardize records management protocols

Create & implement a comprehensive public outreach plan

- Inventory current public outreach activities
- Research communication planning best practices
- Develop communication service level agreements with ACSA and the City of Charlottesville
- Create communication contact lists (names, roles, responsibilities) for City of Charlottesville, Albemarle County, ACSA, and UVA
- Evaluate social media outreach options, including Facebook
- Partner with local schools and civic groups for facility tours and environmental education

Environmental Stewardship Tactics

Increase internal environmental engagement

- Inventory green initiatives
- Partner with Community/env'l groups
- Research other Organizations on green initiatives
- Identify Environmental Engagement goals
- Develop communication tools
- Create Green Road shows

Designate resources to support environmental outreach & green initiatives

- Create a standing Employee Environmental Committee (structure)
- Create a staffing plan (existing and potential new position) Coordinate with Workforce Development
- Develop an annual budget for green initiatives and activities

Solid Waste Services Tactics

Determine community needs & preferred service levels

- Research Existing Solid Waste and Recycling Practices/Data
- Communicate Data and Existing Services to Public
- Design Outreach
- Conduct Outreach
- Analyze Outreach Data
- Report on Outreach Results to Exec. Dir. & Board

Enhance partnerships with local governments & the University of Virginia

- List Potential Partnership Organizations (POs)
- Identify Points of Contact for each PO
- Craft Message (what we are, resources we have, what we do)
- Contact Pos; discuss our resources, operations, needs; define their resources, needs, operations
- Evaluation Process (turn #4 into possible Programs and evaluate)
- Present possible Programs to Exec. Dir. and Board for action (and, if needed, funding)
- Implement

Infrastructure & Master Planning Tactics

Implement an Authority-wide asset management program

- Develop an RFP for an Asset Management Plan
- Create an Asset Management Committee and Prepare for AM
- Identify and Meet Short Term Software Needs
- Procure Consultant Assistance (Phase 1 - Strategic Plan)
- Organize Current Asset Information
- Develop an Asset Management Strategic Plan

Develop & maintain long-term master plans for all critical asset classes

- Inventory all existing master plans
- Identify existing master plan obligations
- Conduct gap analysis to get to comprehensive master plans
- Classify all critical asset classes, functions, and departments that require master planning (in conjunction with Strategy 1, Tactic 5)
- Assign champions to asset class master plans
- Create a process to ensure that master plan-prioritized recommendations are linked to capital improvement program

MEMORANDUM

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

**FROM: LONNIE WOOD, DIRECTOR OF FINANCE AND
ADMINISTRATION**

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: FY 2020 – 2025 SIX-YEAR STAFFING PLAN

DATE: AUGUST 28, 2018

Creating a long-term staffing plan is one of our strategies within the goal of Workforce Development for the Strategic Plan.

Both Authorities' staff and management worked together last spring as part of the budget process to put together a six-year staffing plan. The FY 2019 recommendations in the plan were reviewed and approved by both Boards with the adoptions of the respective budgets in May of 2018. Subsequently, staff has updated the plan this past month, and one of our tactics is to present this plan to the Boards because staffing is an important driver not only in budgeted costs but expected levels of services.

The staffing plan is meant to be a living document that will be continuously updated as we progress through each budget year and address projects within the CIP, changes in technologies and treatment, new facilities, regulatory demands and customer expectations. The plan will change or shift positions over time. Staff has viewed this as an important strategic planning effort, much like the CIP, in communicating future needs of both Authorities to our customers and the Board of Directors.

Included with this memo is a brief narrative to give some background relative to the history of the Authorities' resources concerning staffing levels. There are also some data tables that show this history (Table 3 & 4). I will be glad to answer any questions during the meeting on past staffing levels; however, the first two tables showing the planned positions will be the focus of a brief discussion at the meeting.

Rivanna Authorities

Six-year

Staffing Plan

FY 2020 – FY 2025

Introduction

Staff has had several discussions over the past several months that started during the Capital Improvement Plan (CIP) update. The Authority has historically put significant efforts into infrastructure and capital project planning and execution which is culminated in the yearly update and adoption of the six-year CIP. The greatest asset at the two Authorities is our human resources. The people that plan, manage, run systems for treatment, haul, maintain equipment, test results, provide customer service and support the business functions that make everything happen are the core of these entities. Without our staff, the infrastructure in place or being constructed would have no purpose.

The Executive Director and his Director team decided that a six-year staffing plan was needed and is just as important as the CIP, if not more so. With the successful process of developing a forward-looking and goal-centric strategic plan, this effort has identified staffing needs for the next five years that will help current needs for support and look forward in meeting the goals and mission of the recently adopted Strategic Plan.

The staffing summary identified for both Authorities is presented in Table 1. The details of each position identified is presented in Table 2.

Background

The Water and Sewer Authority, apart from the last few years, has had stable and sometimes declining work force budgets. Some of this was made possible by realizing some efficiencies in the ENR project implementation. Some automation efficiencies allowed for fewer staff for Wastewater. There was also the economic downturn that provided the incentive to reduce staff and replace some of those functions with contractor services such as grounds crew and certain maintenance functions. A history of both Authorities' full-time equivalent (FTE) approved budgeted positions is presented in Table 3.

An example of where the Water and Sewer Authority has limited operations staff is in the area of Water Treatment Plant (WTP) Operators. Regulations promulgated by the Virginia Department of Health (VDH) require specific levels of staffing for treatment plants of different sizes. Many years ago, Rivanna requested and received from VDH a waiver that allowed for the Observatory WTP and South Rivanna WTP to fund and staff only one operator per shift instead of the normally required two operators. (Currently, the waiver does not apply to the South Rivanna WTP). In today's highly technical and complex process environment, staff feels that it is a "best management practice" to staff both South Rivanna WTP and the Observatory WTP with two Operators at all times while the plant is in service, not just one, regardless of the waiver that currently exists. In order to properly staff both Observatory WTP and South Rivanna WTP,

the Authority needs to hire and train additional Operators. These Operators will provide additional oversight for water quality, increased ability to complete preventive maintenance tasks, and create a safer work environment.

The Solid Waste Authority has seen a significant decline in staffing resources. This was due to the decline in tonnages received at the transfer station and the reduction of material received at the recycling centers. Some of these needs were met by contracting with manpower services, especially at the recycling centers, reducing hours of operations and eliminating some services. However, today some services have been restored or even increased with composting, daily paint acceptance and partnering with UVa to process cardboard delivered. There was also pressure to reduce administrative costs across the board for Solid Waste as a whole. Operational staffing issues at the Solid Waste Authority currently can be critical at times. A changing workforce is providing challenges that were not seen before.

Many years ago, there was a Solid Waste Director and a Recycling Manager that handled all contracts, personnel and staffing issues, customer inquiries and complaints, reporting requirements, materials sold at market and more. Today those needs are handled by the Ivy Manager or the Administrative staff. Shifting responsibilities to the administrative staff at the same time as reducing the Solid Waste share of administrative costs meant the Water Authority was in some ways and in terms of allocated costs, subsidizing Solid Waste administrative needs. The Safety Manager was converted to be the Environmental Manager (along with safety responsibilities) to oversee the remediation efforts at Ivy when the Corrective Action Plan was being implemented, because the Director position was eliminated or left unfilled until recently when it was created again. The safety position incidentally was eliminated in 2010 and recreated in 2017. Those duties were taken over by Admin during that 7-year span.

Summary

The Authorities have done more with less in many circumstances. Water & Sewer capital spending went from \$2 million annually in 2007 to \$32 million in 2017 (a 1,500% increase). The operating budget was roughly \$16 million in 2007 and today is \$33 million (a 107% increase). Staffing resource during this same time increased 9%, and most of that in the last two years as shown in Table 3. A comparison of the Albemarle County Service Authority (ACSA) staffing is relevant to some degree because they are experiencing some of the same growth needs and pressures as the Water and Sewer Authority. Table 4 shows the FTE staffing resource changes over this same period. This is relevant because as a direct customer, the ACSA has greater needs from Rivanna for information sharing, planning/collaborating with professional staff, customer needs and regulatory obligations which is indicative of the needs placed on Rivanna.

The need for a planning approach to staffing needs was put together to address some of these background issues and where we are now. It is also presented as a good planning tool to address where we, as two separately but closely intertwined Authorities, want to go into the future as we meet our strategic goals and needs of our customers.

**Rivanna Authorities
Six-Year Staffing Plan**

Table 1

Water & Sewer

FY 2020

1. Water Operator
2. Construction Inspector

FY 2021

3. Lab Technician
4. Construction Inspector
5. Accounting Associate

FY 2022

6. IT Technician
7. Administrative Coordinator/Procurement
8. Mechanic / Trainee

FY 2023

9. Dam Safety Engineer / CIP
10. Management / Budget Analyst
11. SCADA Technician

FY 2024

12. Water Operator
13. Instrumentation Technician

FY 2025

14. IT Technician - Cyber Security

Total 14 Positions

Solid Waste

FY 2020

1. Attendant - McIntire
2. Attendant - Ivy
3. Attendant - Paper sort

FY 2021 - 2025

To be determined as services expands and change. Discussions have been ongoing.

Water & Sewer

FY 2020

Positions	Needs and Duty Descriptions	Strategic Plan Impacts
1. Water Operator	The ACSA has requested that RWSA take over the operation of the Red Hill community well. This water system will also be upgraded to provide fluoridation and pH adjustments using sodium hydroxide. Because of these changes, the system will need to be physically checked every day by an operator. This system services the elementary school and several local residences (approximately 6). Our goal is to have the plants properly staffed according to best practices and Virginia Department of Health regulations and to properly perform daily, weekly and monthly preventative operating maintenance. Additional staffing is required to meet those goals. There is also a need to have one operator who can visit the remote non-urban plants to assist on specialized maintenance items that require more than one operator to perform.	Operational Optimization, Environmental/Permit/Operational Compliance
2. Construction Inspector/Utility Marker	In the interest of cost savings and greater quality control, both RWSA and RSWA are in the process of shifting away from contracted construction inspection. While specialty inspections will still be required, many of the projected capital projects will be inspected and documented by in-house staff. As the number and variety of projects increase, additional staff is needed to meet this demand.	Infrastructure & Operational Optimization

FY 2021

Positions	Needs and Duty Descriptions	Strategic Plan Impacts
3. Lab Technician (distribution system, reservoir and watershed sampling)	Historically, sampling of the distribution systems, reservoirs and watersheds has been conducted by staff from three different departments. In order to best obtain consistency and efficiency of these sampling programs, it would be beneficial to have these programs under the supervision of one Manager. This position would take over the sampling currently being conducted by licensed Water Treatment Plant Operators, the Laboratory Chemist and current Laboratory Technician freeing up their time for higher level tasks (e.g., plant operations and advanced analytical testing). It will also allow the Water Manager and the Laboratory Manager to focus on higher level initiatives. The new Laboratory Technician would work closely with the current Water Quality Specialist to conduct the various sampling programs under the general direction of the Laboratory Manager. Also, this new position will support the increasing analytical loads that the RWSA Laboratory has been experiencing as a result of increased regulatory compliance and process operation requirements.	Operational Optimization, Environmental Stewardship, Environmental/Permit/Operational Compliance
4. Construction Inspector/Utility Marker	In the interest of cost savings and greater quality control, both RWSA and RSWA are in the process of shifting away from contracted construction inspection. While specialty inspections will still be required, many of the projected capital projects will be inspected and documented by in-house staff. As the number and variety of projects increases, additional staff is needed to meet this demand.	Infrastructure & Operational Optimization
5. Accounting Associate	The current accounting staff has not expanded in nearly two decades. During that time the number of operating and capital transactions have increased from \$10 million then to \$31 million today. Revenue bonds have grown from \$35 million then to \$160 million today. This level of business growth is and will stress the accounting and finance function into the future. The complexity of the cost allocations related to the capital expansions is very significant. This position is needed to support the two separate Authorities to meet their outstanding financial reporting and compliance expectations as soon as possible.	Operational Optimization, overall support of all goal implicitly

Water & Sewer

FY 2022

Positions	Needs and Duty Descriptions	Strategic Plan Impacts
6. IT Technician	With the addition of significant security systems, as included in the CIP, will require added network communications and hardware servicing. This will require a staff person to be responsible for security and IT protocol to maintain the integrity of the security systems. Years ago, the Authority installed security systems but did not staff the system accordingly and the systems failed and we returned to old lock and key systems. General IT help desk support is in need as more users and systems are added to our team.	Operational Optimization, Infrastructure Master Planning
7. Administrative Coordinator/Procurement - Admin.	Many positions at the Authority have multiple responsibilities. The HR Manager is also the front Office Manager. The responsibilities of the HR Manager have grown over the last decade, which has inturn had an impact on the administrative functions. As more employees are added, employee recruiting, support and development have pushed other needs off. Procurement and contract management have been significantly increasing over the years with no additional support in that area of business in 20 years. The addition of a staff person to manage the daily front office staffing, focus on procurement/contract management, upgrades to office systems will allow the HR Manager to perform necessary HR functions and focus on strategic goals.	Workforce Development, Operational Optimization, Communication
8. Mechanic/Trainee	With the modernization of all the water and wastewater treatment plants, there has been a significant increase in equipment inventory and overall assets. There is a need for additional staffing to meet this maintenance need. Due to the unique nature of work in the water and wastewater industry, it is essential to train and mentor new employees. This position would allow the Authority to hire a less skilled employee and provide them with the necessary training to fill a mechanic position as they become vacant.	Workforce Development, Infrastructure & Master Planning; Operational Optimization

FY 2023

Positions	Needs and Duty Descriptions	Strategic Plan Impacts
9. Dam Safety Engineer/CIP Coordinator	As the Capital Improvement Program and Operational Program continues to grow, so is the need for project management staffing. Current staff are managing the development, review and construction oversite process; the dam safety program; capital design and construction; line maintenance; system master planning, and asset management.	Infrastructure, Master Planning, Operational Compliance
10. Management/Budget Analyst/Admin.	Possible upgrade to a current Admin. Assistant position but the volume of budgetary and operational administrative needs by all departments would support a new position. Operational Managers have seen an increasing work load related to safety administration, timekeeping, training requirements/tracking, etc. while still being responsible for the ultimate product where a centralized support could create efficiencies. The needs of a more skilled position to set up and handle more complex reporting (budget and operational) writing and analytical support, in-depth research of office systems and administrative policy considerations, requires a more skilled position than our classification system currently provides.	Operational Optimization, Infrastructure Master Planning
11. SCADA Technician	Again, with the major capital projects being constructed and completed, the expectation is the SCADA and instrumentation systems will most likely double in size and complexity. Older systems installed at the wastewater treatment plants will require continuous upgrades. These systems are critical in meeting regulatory and environmental expectations. Our staff currently is supporting the construction projects as well as older system maintenance.	Operational Optimization, Infrastructure Planning, Environmental/Permit/Operational Compliance

Water & Sewer

FY 2024

Positions	Needs and Duty Descriptions	Strategic Plan Impacts
12. Water Operator	Our goal to have the plants properly staffed according to best practices and Virginia Department of Health regulations, and to properly perform daily, weekly and monthly preventative operating maintenance. Additional staffing is required to meet those goals.	Operational Optimization, Environmental/Permit/Operational Compliance
13. Instrumentation Technician	Once the Instrumentation Specialist position is well established and once the increased number of devices have been installed and will be online with the major upgrades and expansions of the main water plants, this position is needed to further support the more technically dependent systems being installed and used for core businesses. Qualified contractors are becoming difficult to find which we currently rely heavily upon.	Operational Optimization, Infrastructure Planning, Environmental/Permit/Operational Compliance

FY 2025

Positions	Needs and Duty Descriptions	Strategic Plan Impacts
14. IT Technician - Cyber Security	Cyber security is becoming an increasingly specialized and time consuming task. Many utilities have full-time jobs dedicated solely to cyber security and disaster recovery. The industry is moving towards mobile devices linking to internal networks that help manage the various processes, alarms and controls through SCADA and related wide area network connections. This is an area that most industry experts are saying needs to be specifically addressed by utilities. This position would also support the internal security networks, camera systems (that are supported by servers and data storage), and communication networks that support them.	Operational Optimization, Infrastructure Master Planning

Solid Waste

FY 2020

Positions	Needs and Duty Descriptions	Strategic Plan Impacts
1. Attendant - McIntire	There are 3 part-time positions that work at McIntire Center currently. These positions cover 57 hours per week of operations to the public. The staffing of this facility with part-time employees makes it difficult to staff and schedule from a management standpoint. Having a more reliable staffing situation by converting two of the part-time FTE positions to a full time position is the goal. This position is a net -0- adding of FTE's. It will have additional costs for benefits.	Provide reliable Solid Waste Services
2. Attendant - Ivy	This position will be dependent on the outcome and approvals of the master plan for the Ivy site to provide a much broader array of recycling services at the Ivy site. A full-time attendant would be needed to help the public as they visit the center, unload, direct traffic and safely operate the center's compactors, trucking/bin pick-up and delivery activities, and maintain the site.	Provide reliable Solid Waste Services
3. Attendant - Paper Sort	The Paper Sort volumes of waste fiber, metal and plastic wastes received for processing and loading into trailers has increased and requires a need for a full-time attendant/operator. This facility currently has only a part-time 0.25 FTE budgeted to it. However, we are using an operator at Ivy to fill in the periods of time when the part-time attendant is not available.	Provide reliable Solid Waste Services

FY 2021 - FY 2025

To be determined as service expansion discussions have been ongoing

RIVANNA AUTHORITIES

Last 15 Fiscal Years

Number of Employees by Department or Identifiable Activity

Table 3

	Fiscal Years Ended June 30,															FTE Changes	
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	#	%
Number of budgeted FTE positions:																	
Joint Operations Management	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	(1.00)	-50%
Water	24	24	24	24	24	23	23	23	23	22	23.4	23.4	23.4	25.4	26.4	2.40	10%
Wastewater	18	18	18	16	16	16	15	18	18	17	17	17	17	16	16	(2.00)	-11%
Laboratory	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	-	0%
Operations	47	47	47	45	45	44	43	46	46	44	45.4	45.4	45.4	45.4	46.4	(0.60)	-1%
Engineering	7	7	7	9	10	10	9	9	9	9	9	9	9	12	11	4.00	57%
Maintenance - Note 1	14	14	15	14	14	14	15	16	16	17	17	17	16	16	17	3.00	21%
Administration / Finance	11	11	11	11	11	11	10	10	10	10	10	10	11	11	11	-	0%
IT / SCADA	1	1	1	1	2	2	2	2	2	2	2	2	4	4	6	5.00	500%
Support Departments	33	33	34	35	37	37	36	37	37	38	38	38	40	43	45	12.00	36%
RSWA Total FTE Staffing	80	80	81	80	82	81	79	83	83	82	83.4	83.4	85.4	88.4	91.4	11.40	14%
Administration	2	2	2	2	2	1	1								1	(1.00)	-50%
Ivy Operations and Environmental	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	(1.00)	-33%
Ivy Transfer / Operations Allocated Positions	8.5	8.5	8.5	9.5	9.5	9.5	6	7.5	7.5	3.2	3.2	3.2	3.2	3.2	5.2	(3.30)	-39%
Drivers and Equipment Allocated Positions	3	3	3	3	3	3	3	4	4	4	4	4	4	4	5	2.00	67%
Recycling Operations	4.2	4.2	4.2	3.63	3.63	2.1	1.1							1.25	1.75	(2.45)	-58%
RSWA Total FTE Staffing	20.7	20.7	20.7	20.13	20.13	17.6	13.1	13.5	13.5	9.2	9.2	9.2	9.2	10.45	14.95	(5.75)	-28%
Total Both Authorities	100.7	100.7	101.7	100.1	102.1	98.6	92.1	96.5	96.5	91.2	92.6	92.6	94.6	98.9	106.4	5.7	5.6%

Note 1 - these positions were in Water and Wastewater prior to FY 2010

ALBEMARLE COUNTY SERVICE AUTHORITY
FULL-TIME EMPLOYEES
LAST 15 FISCAL YEARS

Table 4

Department	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	FTE Increases 15 Years.	
Administration/IT	6	6	6	8	8	8	9	9	10	10	10	10	10	10	10	4	67%
Finance	11	11	13	13	14	14	14	14	15	15	16	16	16	17	17	6	55%
Combined	17	17	19	21	22	22	23	23	25	25	26	26	26	27	27	10	59%
Engineering	13	13	15	15	15	15	15	15	16	16	16	16	16	17	17	4	31%
Maintenance	23	31	31	31	31	31	31	31	31	31	32	33	33	33	33	10	43%
Combined	36	44	46	46	46	46	46	46	47	47	48	49	49	50	50	14	39%
Total	53	61	65	67	68	68	69	69	72	72	74	75	75	77	77	24	45%