



CITY COUNCIL AGENDA
March 17, 2014

6:00 p.m. – 7:00 p.m.

Closed session as provided by Section 2.2-3712 of the Virginia Code

Second Floor Conference Room (Acquisition of real property on 11th Street, N.W., for a public purpose; Consideration of prospective candidates for appointment to City boards and commissions; Discussion of the award of a City contract for recycling services, including the terms and scope of the contract.)

CALL TO ORDER 7:00 p.m.
PLEDGE OF ALLEGIANCE
ROLL CALL

Council Chambers

AWARDS/RECOGNITIONS
ANNOUNCEMENTS

WVPT Children's Event Proclamation (Anne Jolly); Poison Prevention Month; Family Services Staff Appreciation Month; Benefits Worker Month

MATTERS BY THE PUBLIC

Public comment will be permitted for the first 12 speakers who sign up in advance of the meeting (limit of 3 minutes per speaker) and at the end of the meeting on any item, provided that a public hearing is not planned or has not previously been held on the matter.

COUNCIL RESPONSE TO MATTERS BY THE PUBLIC

1. CONSENT AGENDA*

(Items removed from the consent agenda will be considered at the end of the regular agenda.)

a. Minutes for March 5

b. APPROPRIATION:

Special Events Sponsorships – \$10,869 (1st of 2 readings)

c. APPROPRIATION:

Appropriation of Escrowed bond funds from the Landmark Hotel – \$111,006.39 and Transfer of \$102,506.39 (1st of 2 readings)

d. RESOLUTION:

Reallocation of Virginia Department of Rail and Public Transportation FY2014 Mid-Year Funding – \$565,105 (1st of 1 reading)

e. ORDINANCE:

Minimum Attendance Requirements for CRHA (1st of 2 readings)

2. PUBLIC HEARING

FY 2015 Tax Rate

3. PUBLIC HEARING

City Manager's Proposed FY 2015 Budget

4. PUBLIC HEARING

Cost Allocation Agreement for Rivanna Water and Sewer Authority Wastewater Projects

5. REPORT

Rivanna Quarterly Update

6. APPROPRIATION*

Department of Social Services Appropriation for Salary Alignment and Office Space Furnishings – \$211,490 (1st of 2 readings)

7. REPORT

Virginia Produced - Planning Grant Support

OTHER BUSINESS
MATTERS BY THE PUBLIC

*ACTION NEEDED

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**CITY OF CHARLOTTESVILLE, VIRGINIA.
CITY COUNCIL AGENDA.**



Agenda Date:	March 17, 2014
Action Required:	Appropriation of Funds
Presenter:	Brian Daly, Director, Parks and Recreation
Staff Contacts:	Brian Daly, Director, Parks & Recreation Leslie Beauregard, Director, Budget and Performance Management
Title:	Special Events Sponsorships - \$10,869

Background:

Charlottesville Parks & Recreation, through a partnership with BAMA Works, has received generous financial sponsorship for several special events offered to community. The Sunday Sundowns summer events and the Downtown Safe Halloween Festival in 2013 were sponsored by over \$10,000 in financial support from the BAMA Works foundation.

Discussion:

Sunday Sundowns is a multi-week three-part event at Washington Park for an afternoon of swimming, music, food and friendship. The Downtown Safe Halloween festival is an annual event held at the nTelos Wireless Pavilion and includes an afternoon of games, music, halloween costumes and trick or treating on the Downtown Mall. Both events attracted hundreds of attendees.

For each event, Charlottesville Parks & Recreation provided the upfront funds for staff, entertainment and other supplies out of the general fund operating budget. Subsequently, BAMA Works provided a check in support of the events. This item requests appropriation of those funds into the cost center budgets that supported the up-front costs for the events.

The appropriation replacement of these funds is necessary because Parks & Recreation has already expended money from the general fund to produce these events.

Community Engagement:

No specific community engagement occurred in the securing of these sponsorship funds, however numerous community members participated in the events through the sponsorship of BAMA Works.

Alignment with City Council's Vision and Priority Areas:

Appropriation of this item aligns with the City Council Visions of America's Healthiest City and a Smart, Citizen-Focused Government.

Budgetary Impact:

There is no fiscal impact as these funds are a sponsorship reimbursement of funds to support community special events.

Recommendation:

Staff recommends the appropriation of these funds.

Alternatives:

N/A

Attachments:

N/A

APPROPRIATION
Special Events Sponsorships
\$10,869

WHEREAS, the City of Charlottesville, through the Parks & Recreation Department, has received sponsorship funds in the amount of \$10,869 for the Sunday Sundowns and the Downtown Safe Halloween Festival special events

NOW, THEREFORE BE IT RESOLVED by the Council of the City of Charlottesville funding is hereby appropriated in the following manner:

Revenue

\$2,803	Fund: 105	Cost Center: 3661001000	G/L Account: 434230
\$8,066	Fund: 105	Cost Center: 1800006	G/L Account: 451020

Expenditures

\$1,080	Fund: 105	Cost Center: 3631004000	G/L Account: 510030
\$1,843	Fund: 105	Cost Center: 3651001000	G/L Account: 510040
\$2,947	Fund: 105	Cost Center: 3651001000	G/L Account: 520600
\$1,078	Fund: 105	Cost Center: 3661001000	G/L Account: 510030
\$3,921	Fund: 105	Cost Center: 3661001000	G/L Account: 520600

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**CITY OF CHARLOTTESVILLE, VIRGINIA
CITY COUNCIL AGENDA**



Agenda Date: March 17, 2014

Action Required: Approval of Appropriation/Resolution
Transfer of Funds

Presenter: James E. Tolbert, AICP, Director of NDS

Staff Contacts: James E. Tolbert, AICP, Director of NDS

Title: **Appropriation of Escrowed bond funds from the Landmark Hotel - \$111,006.39 and Transfer of \$102,506.39**

Background: When the Landmark Hotel began construction, the City entered into an agreement with the developer that the project would pay a portion of the pedestrian improvements on the adjacent side street, 2nd Street West. The developer posted a bond to guarantee the completion of their share of the project.

Discussion: During the bankruptcy proceedings of the developer the bank that had issued the Letter of Credit provided notice to the City that the bond would not be renewed. The work had already been completed so City staff began an effort to secure the bond proceeds. The Office of the City Attorney was able to negotiate and have \$110,000 of the bond placed in an escrow account that could be accessed in 2014 if the project had not been completed. We were able to gain a release of the funds from the bankruptcy judge earlier this year and now need to appropriate the funds. A total of \$111,006.39 was wired to the City; \$8,500 was paid to Steve Scott, Bankruptcy Trustee, leaving \$102,506.39 to be appropriated to the New Sidewalk account, P-00335.

Citizen Engagement: There has been no community engagement

Alignment with City Council Vision and Priorities: This agenda items aligns with the Council Vision to be a Smart, Citizen-Focused Government.

Budgetary Impact: Approval of this item will increase the funds available in the CIP

for new sidewalk construction by \$102,506.39

Recommendation: Staff recommends approval of the attached appropriation ordinance.

Alternatives: Council could appropriate the funds to another account.

Attachments: Ordinance

APPROPRIATION/RESOLUTION

**Appropriation of Escrowed bond funds from the Landmark Hotel - \$111,006.39
Transfer \$102,506.39 to New Sidewalk Account**

NOW, THEREFORE BE IT RESOLVED by the Council of the City of Charlottesville, Virginia that the following is hereby appropriated and transferred in the following manner:

Appropriation:

\$111,006.39	Fund 426	Funded Program CP-080 - WBS P-00684	GL Account: 451999
\$111,006.39	Fund 426	Funded Program CP-080 - WBS P-00684	GL Account: 599999

Transfer From

\$ 102,506.39	Fund: 426	Funded Program: CP-080 - WBS P-00684	G/L Account: 561426
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Transfer To

\$ 102,506.39	Fund: 427	WBS: P-00335	G/L Account: 498010
\$ 102,506.39	Fund: 427	WBS: P-00335	G/L Account: 599999

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**CITY OF CHARLOTTESVILLE, VIRGINIA.
CITY COUNCIL AGENDA.**



Agenda Date:	March 17, 2014
Action Required:	Resolution to Transfer Funds
Presenter:	John Jones, Charlottesville Area Transit Manager
Staff Contacts:	John Jones, Charlottesville Area Transit Manager Leslie Beauregard, Director, Budget and Performance Management Judy Mueller, Director, Public Works
Title:	Reallocation of Virginia Department of Rail and Public Transportation F.Y. 2014 Mid-Year Funding - \$565,105

Background: In December 2013, Charlottesville Area Transit (C.A.T.) requested that City Council appropriate \$565, 105 for the procurement of a new Electronic Farebox System. These funds were an additional mid-year allocation from The Virginia Department of Rail and Public Transportation (D.R.P.T.) to C.A.T. for use in F.Y. 14. At the time of the D.R.P.T. funds allocation, a misinterpretation of the allocation guidelines led C.A.T. to erroneously request that the funds be used for the capital purchase of a new farebox system. C.A.T. only recently learned that these funds are to be used solely for Operating Assistance.

Discussion: As a result of the recent clarification from D.R.P.T. that these funds may only be used for Operating Assistance, C.A.T. is requesting that Council approve three measures; (1) that Council approve transferring the expenditure budget for the Electronic Farebox System from C.A.T.'s Maintenance Cost Center to C.A.T.'s Capital Cost Center; (2) that Council approve transferring the revenue budget for the Electronic Farebox System from C.A.T.'s Maintenance Cost Center to the Operating Cost Center; (3) that Council approve transferring \$565,105 of the City's Contribution to C.A.T.'s currently budgeted Operating Cost Center to C.A.T.'s Capital Cost Center. Reallocating this portion of the City's Contribution will not affect eligibility for F.T.A. funding, since the currently budgeted City Contribution is in excess of the federally required minimum.

Community Engagement: There is no public notice required for this funding.

Alignment with City Council's Vision and Priority Areas: Approval of this agenda item aligns directly with Council's vision for Charlottesville as a Connected Community, by contributing to an efficient and convenient transit system.

Budgetary Impact: This request is cost neutral. C.A.T. is not requesting additional funds, but a re-allocation of funds from one cost center to another. The \$565,105 reallocation request from the Transit Operations Cost Center to C.A.T.'s C.I.P. allocation will be replaced by D.R.P.T.'s F.Y. 14 Mid-Year Operating Assistance.

Recommendation: Approval of reallocation of funding.

Alternatives: If these funds are not reallocated into Operating Funds, the funds will be returned to D.R.P.T. no later than June 30, 2014. Without Council's approval to reallocate \$565,105 from C.A.T's Operating Budget to the Capital Cost Center, C.A.T. will be unable to proceed with the Electronic Farebox Procurement.

Attachments: N/A

RESOLUTION.
Reallocation of Virginia Department of Rail and Public Transportation
F.Y. 2014 Mid-Year Funding.
\$565,105.

WHEREAS, the Virginia Department of Rail and Public Transportation has approved an allocation to the City of Charlottesville in the amount of \$565,105 for use during F.Y. 2014.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Charlottesville, Virginia that \$565,105 is hereby transferred in the following manner and is not deemed to expire unless further altered by Council:

Transfer Expenditures:

From:

Fund: 245 I/O: 2200005 (CC: 2801004000) G/L: 541011 \$565,105

To:

Fund: 245 I/O: 2600020 (CC: 2804001000) G/L: 541011 \$565,105

Transfer Revenues:

From:

Fund: 245 Cost Center: 2801003000 G/L: 498010 \$565,105

To:

Fund: 245 I/O: 2600020 (CC: 280400100) G/L: 498010 \$565,105

From:

Fund: 245 I/O: 2200005 (CC: 2801004000) G/L: 430110 \$565,105

To:

Fund: 245 Cost Center: 2801003000 G/L: 430110 \$565,105

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**CITY OF CHARLOTTESVILLE, VIRGINIA
CITY COUNCIL AGENDA**



Agenda Date:	March 17, 2014
Action Required:	Approval of Ordinance (First Reading)
Presenter:	Allyson Manson Davies, Deputy City Attorney
Staff Contacts:	Allyson Davies, Deputy City Attorney
Title:	Amendment to City Code Section 2-37; Removal of Commissioners of Charlottesville Redevelopment and Housing Authority

Background: The Charlottesville Redevelopment and Housing Authority Board of Commissioners is currently discussing amendments to their by-laws to improve attendance at meetings and to avoid further meetings where there is no quorum to conduct business. One consideration before the CRHA Board is to adopt a provision requiring an automatic request to Council to remove any Commissioner who has a series of unexcused absences. Pursuant to this initiative by CRHA, City Council seeks to clearly establish the standards and procedures which shall apply when considering removal of a CRHA Commissioner.

Community Engagement: The proposed addition of subsection (e) to City Code § 2-37 follows Virginia Code § 36-17 and therefore community engagement is not relevant. Adoption of subsection (e) shall help to promote efficiency and ensure that public meetings have a quorum to conduct business and receive comments from the public.

Discussion: Virginia Code § 36-1 *et seq.* (hereinafter "Housing Authorities Law") governs the structure and operational requirements for existing housing authorities within the Commonwealth of Virginia. Specifically, Virginia Code § 36-17 addresses the removal of housing authority commissioners. This section states in relevant part:

For inefficiency or neglect of duty or misconduct in office, a commissioner of an authority of any city or county may be removed by the governing body of such city or county; but a commissioner may be removed only after he shall have been given a copy of the charges at least ten days prior to the hearing thereon and had an opportunity to be heard in person or by counsel. In the event of the removal of any commissioner, a record of the proceedings, together with the charges and findings thereon, shall be filed in the office of the clerk.

Inefficiency, neglect, and misconduct are not expressly defined within the Housing Authorities Law and such terms should be given their plain meaning.

The proposed amendment adding subsection (e) to City Code § 2-37 allows City council to establish that neglect of duty will include a failure to meet reasonable attendance requirements of the Authority. Further, the addition of this paragraph to the ordinance will provide clear guidance to Council, and the public at large, as to the procedure required to remove an appointed Commissioner. Subsection (e) will promote efficiency and proper adherence to the Housing Authorities law.

Alignment with City Council's Vision and Priority Areas: The amended ordinance aligns with Council's vision for a Smart, Citizen-Focused Government as it will encourage Commissioner attendance, promote efficiency and ensure that public meetings have a quorum to conduct business and receive comments from the public.

Budgetary Impact: This item has no current impact on the budget. This amendment aligns the City Code to state law.

Recommendation: Staff recommends City Council approve the amended ordinance.

Alternatives: Council could choose not to add subsection (e) and address any future request for removal of a CRHA Commissioner on a case by case basis.

Attachments: Proposed Ordinance

**AN ORDINANCE
AMENDING AND REORDAINING SECTION 2-37 OF ARTICLE II
OF CHAPTER 2 (ADMINISTRATION) OF THE
CHARLOTTESVILLE CITY CODE, 1990, AS AMENDED,
SETTING REQUIREMENTS FOR REMOVAL OF COMMISSIONERS.**

BE IT ORDAINED by the Council for the City of Charlottesville, Virginia, that Section 2-37 of Article II of Chapter 2 of the Code of the City of Charlottesville, 1990, as amended, is hereby amended and reordained, as follows:

**CHAPTER 2. ADMINISTRATION
ARTICLE II. CITY COUNCIL
Division 1. Generally**

Sec. 2-37. Designation and appointment of board of commissioners of city redevelopment and housing authority.

(a) Notwithstanding any provision of law to the contrary, the terms of all commissioners of the Charlottesville Redevelopment and Housing Authority shall terminate on July 31, 1999; and thereafter commissioners shall be appointed in accordance with the provisions of this section.

(b) Effective July 31, 1999 there shall be seven (7) commissioners of the Charlottesville Redevelopment and Housing Authority appointed by city council. The board of commissioners shall include:

- (1) At least one (1) member of city council;
- (2) At least two (2) current residents of public housing.
- (3) The remaining members of the board of commissioners shall be appointed by city council from the public at-large.

(c) At their first meeting following the effective date of this section, the board of commissioners shall elect one of their members to serve as chair of the board.

(d) Any member of city council appointed to the board of commissioners shall serve a one (1) year term, and shall be eligible for reappointment for so long as such person is a member of city council. The remaining initial appointments to the board shall be equally divided, to the extent possible, between two (2) and three (3) year terms. After expiration of the initial terms all future appointments shall be for three (3) year terms, except for appointments of city council members. Eligibility for reappointment shall be governed by the provisions of City Code section 2-8.

(e) Commissioners of the Charlottesville Redevelopment and Housing Authority shall serve for their full term unless earlier terminated by city council or upon acceptance by city council of a commissioner's resignation. Commissioners may be removed by council for inefficiency, or neglect of duty, including failure to meet reasonable attendance requirements of the Charlottesville Redevelopment and Housing Authority, or for other misconduct in office. Notwithstanding the foregoing, a commissioner may be removed only after such commissioner is given a copy of the charges forming the basis of the removal and an opportunity to be heard in person or by representative prior to removal. At least ten (10) days in advance of the hearing before city council, a commissioner objecting to removal shall be given a copy of the charges which form the basis for the removal. In the event of removal of any commissioner, a record of the proceedings, together with the charges and findings thereon, shall be filed in the office of the clerk of council.

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**CITY OF CHARLOTTESVILLE, VIRGINIA.
CITY COUNCIL AGENDA.**



Agenda Date:	March 17, 2014
Action Required:	None
Presenter:	Maurice Jones, City Manager
Staff Contacts:	Leslie Beauregard, Director, Budget and Performance Management Ryan Davidson, Budget and Management Analyst
Title:	Public Hearings – F.Y. 2015 Tax Rate and City Manager’s Proposed F.Y. 2015 Budget

Background:

The Council meeting on March 17th marks the first two public hearings for the F.Y. 2015 budget process. One public hearing is held for the proposed real estate tax rate. A second public hearing on this same night is held for the proposed budget. Two legal ads were placed in the Daily Progress with information on these public hearings, the proposed tax rate and the budget: February 14, 2014 and March 3, 2014.

Discussion:

The total General Fund Budget is proposed to be **\$150,611,460**, a **1.65%** increase over F.Y. 2014. The proposed budget also includes a **\$16.51M** Capital Improvement Program budget.

The proposed real estate tax rate for F.Y. 2015 is **\$.95/\$100 assessed value**, no change from F.Y. 2014.

Community Engagement:

There are several opportunities for the community to provide input into the budget. In addition, a few minutes are reserved at the end of each Budget Worksession for public comment and input:

Community Budget Forum	March 19, 2014 – 7:00PM City Space Meeting Room
Council Budget Worksession	March 27, 2014 – 5:00PM City Space Meeting Room
Second Public Hearing and First Budget Reading	April 7, 2014 – 7:00PM Council Chambers
Council Budget Worksession	April 10, 2014 – 5:00PM City Space Meeting Room

Second Reading and Budget
Adoption

April 11, 2014 – 1:00PM
City Hall - Second Floor Conference Room

Alignment with City Council’s Vision and Priority Areas:

This proposed budget aligns with Council’s Vision and Priority Areas, detailed in the budget document.

Budgetary Impact:

N/A

Recommendation:

N/A

Alternatives:

N/A

Attachments:

The proposed budget document and materials for the budget worksessions are posted at www.charlottesville.org/budget.

**CITY OF CHARLOTTESVILLE, VIRGINIA
CITY COUNCIL AGENDA**



Agenda Date: March 17, 2014

Action Required: Approval of Resolution (One reading)

Presenter: City staff

Staff Contacts: Craig Brown, City Attorney
Lauren Hildebrand, Director of Utilities
Maurice Jones, City Manager
Judith Mueller, Director of Public Works
Bernard Wray, Director of Finance

Title: Cost Allocation Agreement for Rivanna Water and Sewer Authority
Wastewater Projects

Background:

Since 1973 the Rivanna Water and Sewer Authority (RWSA) has owned and operated facilities for the interception and treatment of wastewater that originates in the City of Charlottesville, in the urban growth area of Albemarle County surrounding the City, and in the Crozet area in Albemarle County. A number of the RWSA wastewater facilities require, or will soon require, replacement or improvement either because current wastewater flows at times exceed the capacity of a particular facility; or the facility needs to be upgraded and improved to meet more stringent regulations for the treatment of wastewater; or the facility is nearing the end of its useful life.

The costs for these RWSA capital improvements must be paid by the City of Charlottesville and the Albemarle County Service Authority (ACSA). In the summer of 2012 representatives of the City and ACSA began discussions regarding an allocation of costs for the new Rivanna Pump Station, which will be located at the site of the Moores Creek Wastewater Treatment Plant and will replace the undersized pump station currently located adjacent to Riverview Park in the City. Over time those discussions evolved into mediated negotiations for the sharing of costs for all RWSA capital wastewater projects, including those completed in the recent past and those planned for the future. The attached draft Agreement is the product of those negotiations.

Discussion:

The draft Agreement, entitled “Wastewater Projects Cost Allocation Agreement between the City of Charlottesville, Virginia, the Albemarle County Service Authority, and the Rivanna Water and Sewer Authority”, explains how the debt service costs for RWSA capacity and non-capacity related capital wastewater projects will be allocated between the City and ACSA. For existing capacity related projects (listed in Exhibit A to the Agreement), the costs will be derived from the

City's and ACSA's respective usage of the particular wastewater facility, as projected over the next sixty years. The determination of usage will be based on metering wet weather flows (2-year storm event) and dry weather flows in the wastewater project sewer basin area every 5 years. A table of projected dry and wet weather flows for the City and ACSA for a sixty-year period will be prepared by an independent engineer, taking into account anticipated growth in each system. Every 10 years, land development and population updates will be incorporated in the projections. Initially, the wastewater flow data from the RWSA Comprehensive Sanitary Sewer Interceptor Study Report (prepared by Greeley and Hanson in July 2010) will be used to allocate outstanding debt service costs. If the proposed Agreement is approved by all three public bodies, RWSA will immediately begin the process of installing flow meters to update the 2010 Greeley and Hanson data, in order to base future allocations on the most accurate information available regarding current and future flows from the two jurisdictions. At the request of the City and ACSA, RWSA retained an outside consulting firm to provide an independent review of the proposed methodology. That review concluded that the proposed methodology represented a reasonable approach consistent with industry standards and practices.

RWSA has previously collected debt service costs from the City and ACSA for the existing capacity related wastewater projects listed in Exhibit A. The proposed Agreement, if approved, will operate prospectively only, and debt service costs collected from the City and ACSA prior to July 1, 2014 will not be reallocated.

The Agreement also addresses the allocation of costs for non-capacity wastewater projects, which are projects that will improve the quality, but not quantity, of wastewater treatment, or are limited to the rehabilitation, maintenance or repair of existing wastewater facilities. Those projects are listed on Exhibit B to the Agreement. The determination of costs for these projects will be based on the annual projection of system-wide wastewater flows from the City and ACSA, with the allocation of those costs based on the percentages of metered retail water sales from RWSA to the City and ACSA, respectively. This methodology reflects RWSA's current practice of allocating debt service costs for non-capacity related wastewater projects, as well as for overall operational costs.

A common challenge in the operation of a wastewater collection system is inflow and infiltration ("I and P"), or the unintended introduction of storm water into the wastewater system. The presence of storm water in the wastewater system uses the system's available capacity, and can result in the need to enlarge collection and treatment facilities before the end of their useful life. In this proposed Agreement the City, ACSA and RWSA all commit to the aggressive pursuit of cost effective methods of remediating I and I. The proposed agreement specifies that if an upgrade or replacement is necessary for a facility before its useful life is exhausted due to flows exceeding the amount projected, either due to the failure to curtail I and I or to unanticipated growth, the entity responsible for the additional flows will be responsible for the entire cost of providing the additional capacity.

Community Engagement:

A public hearing has been scheduled for the March 17th meeting of City Council in order to receive public comment on the proposed Cost Allocation Agreement.

Alignment with City Council's Vision and Priority Areas:

By constructing RWSA's wastewater treatment projects, capacity-related sanitary sewer overflows will be eliminated. A stated priority of City Council is to cultivate streams and rivers through effective stormwater management practices. Effective stormwater management practices include eliminating illicit discharges (such as sanitary sewer flows) into the streams and rivers. In addition, one of the City Council's Visions is associated with a "Green City," which promotes healthy rivers and streams. Sanitary sewer overflows can harmfully impact streams and rivers.

Budgetary Impact:

The allocation of costs under the Agreement will affect the debt service component of the wholesale wastewater rate RWSA charges the City and ACSA. This wholesale rate is then incorporated in the City's wastewater utility rate. It is anticipated that in the immediate future the City's share of the wastewater debt service will increase over the amount charged through RWSA's current methodology of allocating costs. The longer term budgetary impacts will depend on the results of future flow monitoring, and the extent that City or ACSA flows change due to the remediation of I and I or growth in the areas served by the urban wastewater system.

Recommendation:

Staff recommends approval of the attached Resolution authorizing the execution of the Wastewater Projects Cost Allocation Agreement between the City, ACSA and RWSA.

Alternatives:

If the proposed Agreement is not approved City Council can propose a resumption of negotiations with ACSA, or allow wastewater debt service costs to continue to be allocated under the methodology currently used by RWSA.

Attachments:

Proposed Wastewater Projects Cost Allocation Agreement, with Exhibits
Proposed Resolution

RESOLUTION

BE IT RESOLVED by the Council for the City of Charlottesville, Virginia, that the Mayor is hereby authorized to sign the following document, in form approved by the City Attorney or his designee.

Cost Allocation Agreement among the City of Charlottesville, Albemarle County Service Authority, and Rivanna Water and Sewer Authority for certain wastewater projects.

**WASTEWATER PROJECTS
COST ALLOCATION AGREEMENT
between the
CITY OF CHARLOTTESVILLE, VIRGINIA,
the
ALBEMARLE COUNTY SERVICE AUTHORITY,
and the
RIVANNA WATER AND SEWER AUTHORITY**

This Agreement is made for purposes of identification this ____ day of _____, 2014, by and between the CITY OF CHARLOTTESVILLE, VIRGINIA, a municipal corporation (the “City”), the ALBEMARLE COUNTY SERVICE AUTHORITY, a public body politic and corporate (“ACSA”), and the RIVANNA WATER AND SEWER AUTHORITY, a public body politic and corporate (“RWSA”).

WITNESSETH:

A. RWSA owns and/or operates facilities for the interception and treatment of wastewater pursuant to the terms of a Four-Party Agreement dated June 12, 1973, among the City, RWSA, ACSA and the Board of Supervisors of Albemarle County (the “Four-Party Agreement”) and several supplementary agreements.

B. The urban wastewater system generally serves all of the City of Charlottesville, the urban growth area of Albemarle County surrounding the City of Charlottesville, and the Crozet area of Albemarle County and consists of all wastewater-related facilities operated by RWSA and served by the Moores Creek Advanced Wastewater Treatment Facility, including sewer interceptors, pipelines, pump stations, and other appurtenances connected thereto (the “Urban Wastewater System”).

C. RWSA, in order to increase the available capacity of the wastewater treatment system for wet weather, has undertaken several wastewater projects, including the Rivanna Pump

Station Project described in the Authorization to Construct dated August 5, 2013 (the “RPS Project”) issued by the Virginia Department of Environmental Quality. The RPS Project is designed to increase the capacity of the Rivanna Interceptor to carry a rate equivalent to 53 million gallons per day (MGD) at the crest of the wastewater flow to the pump station resulting from a two-year recurrence wet weather event.

D. Prior to this Agreement, and until approximately 1999, RWSA allocated the cost of new wastewater projects jointly agreed upon by the City and ACSA in addition to those described in Section 4.1 and Exhibit 6 of the Four-Party Agreement (irrespective of whether they were capacity-related) pursuant to Section 7.2(b) of the Four-Party Agreement, except for the Moores Creek Relief Sewer Project, 30% of the costs for which were allocated to the City and 70% of the costs for which were allocated to ACSA pursuant to an Agreement dated June 29, 1990. The cost and debt service for new wastewater projects commenced on or after approximately 1999 (irrespective of whether they were capacity-related) were allocated to the City and ACSA based on historical budgeted wastewater flows from the City and ACSA on a system-wide basis. The City and ACSA now want to (i) more accurately reflect future cost allocation for the RPS Project and all other existing or future capacity-related wastewater projects, without true-up for past allocations (including past allocations of charges set for the fiscal year ending June 30, 2014 and all prior fiscal years), to cover future costs of the RPS Project and all other capacity-related projects including, but not limited to, design, bidding, and easement acquisition and (ii) confirm the existing and continuing cost allocation method for existing and future non-capacity-related wastewater projects.

NOW THEREFORE, for and in consideration of the premises and other good and valuable consideration, the receipt of all of which is hereby acknowledged, the City, ACSA and RWSA agree as follows:

1. Allocation of Previously Incurred Costs. Except as otherwise provided in the Four-Party Agreement with respect to the projects listed on Exhibit 6 thereof or in the Agreement dated June 29, 1990 with respect to the Moores Creek Relief Sewer project, or as may otherwise be agreed to by the City, ACSA and RWSA, charges related to all wastewater projects in RWSA's Capital Improvements Program ("CIP") for which construction has been commenced prior to the date hereof and charges related to the RPS Project, in each case for work performed or debt service owed for periods on or prior to June 30, 2014, or prior to the date of this Agreement, whichever occurs later, irrespective of when invoiced or paid, have been or will be allocated to the City and ACSA through the setting of wastewater rates for each of the City and ASCA using the allocation percentages set by RWSA on and after 1999, and shall not be subject to true-up. Charges for work performed and debt service owed shall include the budgeted (as opposed to actual) costs of engineering, construction, legal and land costs, administrative costs, permit fees, debt service (including anticipated debt service in the period before bonds are issued or loans are obtained to finance wastewater projects), and establishment of reserves and related expenses (hereinafter collectively referred to as the "Debt Service Charges").

2. Allocation of Future Debt Service Charges Related to the RPS Project and all Capacity-Related Wastewater Projects. RWSA shall allocate all Debt Service Charges for the RPS Project and all existing and future wastewater projects in RWSA's CIP for the purpose of increasing wastewater treatment system capacity (excluding projects for the maintenance,

rehabilitation and repair of such projects) (individually, a “Capacity-Related Wastewater Project”, and collectively, the “Capacity-Related Wastewater Projects”) related to budgeted work performed or debt service owed for periods on or after July 1, 2014 or on or after the date of this Agreement, if later, irrespective of when invoiced or paid, by setting wastewater rates in such a manner (or imposing a Debt Service Charge, if permitted by the Four-Party Agreement, as amended) so as to allocate a percentage of such Debt Service Charges to the City, and the remaining percentage of such Debt Service Charges to ACSA, based upon dry and wet weather flows of each of the City and ACSA for the RPS Project and any existing and future Capacity-Related Wastewater Projects as provided in Section 4 below, and subject to adjustment as provided in Section 5 below. A list of existing Capacity-Related Wastewater Projects is attached hereto as Exhibit A.

3. Allocation of Future Debt Service Charges Related to Non-Capacity-Related Wastewater Projects. Debt Service Charges for RWSA wastewater projects that are in RWSA’s CIP and are not capacity-related, but (i) improve the quality but not quantity of service (e. g., technology to increase the removal of pollutants from wastewater, which may be in response to more stringent federal or state regulations), or (ii) limited to the rehabilitation, maintenance or repair of the existing Urban Wastewater System or equipment replacement or renewal (collectively, “Non-Capacity-Related Wastewater Projects”), unless otherwise agreed to by the City, ACSA and RWSA, shall be determined and allocated based upon the annual projection of system-wide wastewater flows from the City and ACSA, as has been historically done since 1999; provided, however, that the Debt Service Charges for such projects only serving the City or only serving ACSA shall be allocated solely to such party. A list of existing Non-Capacity-

Related Wastewater Projects, including those serving only the City or ACSA, is attached hereto as Exhibit B.

4. Flow Metering, Data and Methodology. Dry and Wet Weather Flows (as defined in subsection a. below) shall be based upon data collected from wastewater flow meters and an analysis of such data within the particular Capacity-Related Wastewater Project (each, a “Metering Event”) by a professional engineering consulting firm (the “Engineer”) selected by RWSA, subject to the approval of both the City and ACSA, such approval not to be unreasonably delayed or withheld. Metering Events to update Dry and Wet Weather Flows for the RPS Project and all existing and future Capacity-Related Wastewater Projects shall be performed every five years as more fully described in subsection b. below.

a. Dry Weather, Peaking and Wet Weather Flows Metering Analysis. Dry Weather Flows for the RPS Project and each Capacity-Related Wastewater Project shall be defined as the average daily flow at the location in the Urban Wastewater System on the downstream end of each specific Capacity-Related Wastewater Project (the “Project Location”) multiplied by a factor to be determined by the Engineer as appropriate for the project to take into account probable diurnal variation in dry weather flows at the peak of a wet weather event. Average daily flow shall be determined by the Engineer based on metering data at the Project Location for a specific period of time for each Metering Event sufficient to identify repetitively similar results, with flow during periods influenced by rainfall and other anomalies identified by the Engineer removed from the data analyzed, and shall be an arithmetic average of the remaining dataset. The Engineer shall also meter wastewater flows during rainfall events at the Project Location during a Metering Event, together with analyzing data from rain gauges installed at nearby

locations to reasonably predict rainfall in the collection system served by the Project Location. Rainfall events shall be categorized based upon recurrence frequency. When, in the opinion of the Engineer, a sufficient number of rainfall events have occurred to allow a reasonably accurate approximation of the predicted wastewater flows during a 2-Year recurrence rain event (a “2-Year Storm”), to include data from at least one rain event with a recurrence near or with less frequency of recurrence than a 2-Year Storm, the Engineer shall analyze and model the data and recurrence interval of the rainfall events for which data has been collected and extrapolate the predicted wastewater flow of the 2-Year Storm in the form of a hydrograph showing the rise and fall of the flow during the storm with the peak of the hydrograph occurring when the dry weather component of the flow (that flow that would be present in the sewer had no rain occurred) equals the average daily flow multiplied by the factor determined by the Engineer as appropriate for the project to take into account probable diurnal variation weather flows at the peak of a wet weather event. This 2-Year recurrence wastewater flow event and the data extrapolated therefrom is known as the total maximum flow or the peaking flow (the “Peaking Flow”). Wet Weather Flow shall be defined as the Peaking Flow on the hydrograph of the 2-Year Storm minus the Dry Weather Flow. The parties agree that the data generated by a properly installed, calibrated and operating meter installed in the Urban Wastewater System at the Project Location, combined with rain gauges within the upstream RWSA, City, and ACSA sewer collection systems, shall be used to determine total Dry Weather Flow and Peaking Flow for a Capacity-Related Wastewater Project, but to determine the component of those totals attributed to the ACSA collection system vis-à-vis the City collection system will require additional meters upstream (as the sewer

flows) from the Project Location, generally providing data during the same period and using the same methodology for determining Dry Weather Flow and Peaking Flow at the upstream locations, where material wastewater flows pass through collector interconnections from a system owned by the City or ACSA into a system owned by a different entity among the RWSA, the City, or ACSA. Recognizing that both the City and ACSA have a limited number of sewer service connections from residences and businesses connected directly to a RWSA interceptor and, in addition, recognizing that some the collector interconnections carry a very small flow, the City and ACSA further agree that the Engineer shall not be required to meter every collector interconnection and may extrapolate for unmetered locations when, in the Engineer's professional judgment, such extrapolations are unlikely to produce results materially different than the results that would have been obtained by attempting to meter every collector interconnection. A spreadsheet showing the analysis of the 2006 flow data from the Engineer for the Urban Wastewater System, including the RPS Project, is attached hereto as Exhibit C.

b. Flow Metering Analysis Updates. To the extent practicable, Dry Weather Flow, Peaking Flow and Wet Weather Flow calculated pursuant to subsection a. above for each Capacity-Related Wastewater Project will be updated by the Engineer every fifth year, beginning in 2015, and subsequently updated every five (5) years thereafter. In the event the Peaking Flow is determined by the Engineer to be more or less than the Project's design capacity, the allocations used in Section 5.b. shall be based on the Peaking Flow most recently determined by the Engineer. Recognizing that the determination of Peaking Flow requires capturing data that occurs infrequently and is based upon weather events which cannot be controlled, the Engineer may use data

captured in the two preceding calendar years prior to the year of the update in addition to data from the year of the update, if necessary to provide sufficient data from the analysis (for example, data collected in 2018, 2019, or 2020 may be used for the 2020 update). Further, the deadline for completing an update shall be extended should abnormally dry weather conditions prevail over an extended period making the collection of sufficient flow data during significant rainfall events unavailable. The Engineer shall provide with each such flow update an updated projection of future Dry Weather Flows, Peaking Flows and Wet Weather Flows for the Project Locations, together with the predicted portion of these flows from the ACSA and City, combined to equal the total projected Dry Weather, Peaking and Wet Weather Flows. Dry Weather Flow projections in 2020 and every ten (10) years thereafter shall be based upon updated land development and population projections provided by the planning departments at the City and County of Albemarle; Dry Weather Flow projections in 2015 and every ten (10) years thereafter shall update the current Dry Weather Flow based on the most recent data analysis, but projections of future flow extended from the new current flow will use the same planning data from the immediate prior projection. RWSA's cost for the purchase or lease, maintenance, repair, calibration, and replacement of sewer meters, and the cost of data collection and analysis, including the cost of the Engineer and any other engineering services required by RWSA to carry out the terms of this Agreement, and any other miscellaneous costs including legal expenses incurred by RWSA in connection with this Agreement and its performance hereunder, shall be allocated as described in Section 10 below.

5. Flow Allocation Methodology and Debt Service Schedules. Debt Service Charges are set by RWSA through its Board of Directors as part of the annual approval of the fiscal year operating budget, and such charges may be amended at other times during the fiscal year, but historically have been maintained for the entire fiscal year and adjusted annually. Debt Service Charges for the RPS Project and each Capacity-Related Wastewater Project shall be based upon budgeted costs and may be applied uniformly over multiple fiscal years as permitted under Section 7.4 of the Four Party Agreement. For the purpose of determining Debt Service Charges, estimated or actual costs in a fiscal year assigned to a project may include (i) cash payments and/or the build-up of reserves prior to the closing of bond or loan financing for the applicable project, except to the extent bond proceeds are reimbursing such payments or reserves, and (ii) debt payments after the closing of bond or loan financing until the maturity date. Budgeted costs, whether estimated or actual, for the items set forth in clause (i) above shall be included in Debt Service Charges for the RPS Project or any Capacity-Related Wastewater Projects and allocated based upon the most recent proportional projected dry and wet weather flows by the City and ACSA over the entire 60-year projection period. For budgeted, whether estimated or actual, bond or loan repayments set forth in clause (ii) above, RWSA shall prepare worksheets to allocate Debt Service Charges for each bond issue, using the cost allocation method applicable to the project or group of projects financed by the bond or loan for the term of the bond or loan as follows:

a. Allocation of Bonded Debt. RWSA shall create a debt service schedule for each bond, promissory note or other debt instrument evidencing a loan, including any refinancing of the same (individually, a “Bond”, and collectively, the “Bonds”), allocate the debt service to the applicable rate center, and allocate the rate center debt service on a

project-by-project basis using the formula in this Agreement for all Capacity-Related Wastewater Projects, the Four-Party Agreement for all projects under Exhibit 6 thereof, or the system-wide historical Urban Wastewater System flows as has been done since 1999 for all other wastewater projects, as follows:

(i) a total debt service amortization schedule shall be maintained for each outstanding Bond;

(ii) the applicable amount of each Bond shall be allocated to the respective rate center based upon the estimated amount of proceeds from the Bond used for each project (whether one or more) and the rate center for the applicable project (e.g. water and wastewater – rural or urban rate centers, with the Urban Wastewater Rate Center applicable to projects covered under this Agreement);

(iii) within each rate center, the particular Bond debt service amortization shall then be allocated based on the estimated use of the proceeds of the Bond for each project or group of projects and applicable cost allocation method for each project financed by such Bond.

(iv) a total of the Bond debt service amounts for each project derived from the allocation in subsection (iii) above shall be prepared for the allocation for each project or group of projects within the Urban Wastewater Rate Center, in order to account for the fact that any one wastewater project could be financed by more than one Bond.

b. Allocation Table for Dry and Wet Weather Flows. The table of flows prepared by the Engineer as provided in Section 4.a shall be projected to cover a sixty-

year period into the future, and be broken down into yearly increments and shall show the projected Dry Weather and Peaking Flow for each year of the sixty-year period for each of the City and ACSA as needed for the applicable project. Wet Weather Flow is then calculated as the difference between Peaking Flow and Dry Weather Flow for each of the years in the sixty-year period. RWSA shall use the table of flows including the projection of Wet Weather Flows to create a schedule of six debt service segments for the purpose of allocating the debt service amounts determined under Section 5.a. The debt service segments shall be comprised of the average percentage of flows for each of the six successive ten-year periods within the sixty-year table of flows. An example of the schedule of segments is shown below:

Ten year Flow Data	Debt Service Segments	WW / DW Flow Ratio			DW _{ACSA} & DW _{City} % of Avg. Daily			WW _{ACSA} & WW _{City} % of I&I		
		% of Flow for Avg. day	% of Flow for I&I	Total Max or Peak Flow	ACSA	CITY	100%	ACSA	CITY	100%
Year 1 - 10	Segment 1	16%	84%	100%	55%	45%	100%	38%	62%	100%
Year 11 - 20	Segment 2	18%	82%	100%	59%	41%	100%	43%	57%	100%
Year 21 - 30	Segment 3	20%	80%	100%	62%	38%	100%	48%	52%	100%
Year 31 - 40	Segment 4	23%	77%	100%	65%	35%	100%	53%	47%	100%
Year 41 - 50	Segment 5	25%	75%	100%	67%	33%	100%	59%	41%	100%
Year 51 - 60	Segment 6	xx%	xx%	100%	xx%	xx%	100%	xx%	xx%	100%

Used in section 6.	DW	WW	DW _{ACSA}	DW _{City}	WW _{ACSA}	WW _{City}
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Debt Service Charges for each Capacity-Related Wastewater Project for the first five years, and each five-year period thereafter, shall be based upon the average projected flows for the corresponding ten year debt service segment (i.e. debt service segment 1 will be used for five years (years 1-5) of the debt service, debt service segment 2 will be used for next five years (years 6 – 10) of debt service, debt service segment 3 will be used for the next five years (years 11 – 15) of debt service, etc.) until retirement of the debt for the project, including any refinancing of such debt, if any, using the allocation

method for such project provided under Section 6 below, based upon the Engineer’s flow analysis for the project as updated pursuant to Section 4.b. The first year of debt service segment 1 shall be defined as the first fiscal year in which RWSA budgets to begin incurring costs for the project, and may be different from the year in which Bonds funding the project are issued.

6. Allocation Formula. The allocation formula for determination of the Debt Service Charges to be allocated to the City and ACSA for the RPS Project and each Capacity-Related Wastewater Project is set forth below:

$$D_{ACSA} = [(D_{DRY} \times DW_{ACSA}) + (D_{WET} \times WW_{ACSA})]$$

$$D_{CITY} = [(D_{DRY} \times DW_{CITY}) + (D_{WET} \times WW_{CITY})]$$

Where:

DEBT SERVICE

D_{ACSA} = Project Debt Service Charges to ACSA for a given fiscal year

D_{CITY} = Project Debt Service Charges to City for a given fiscal year

D_{TOTAL} = Total Project Debt Service Charges for a given fiscal year required to meet RWSA revenue requirements

D_{DRY} = Debt Service attributed to total Dry Weather Flow ($D_{TOTAL} \times DW$)

D_{WET} = Debt Service attributed to total Wet Weather Flows ($D_{TOTAL} \times WW$)

RATIOS OF FLOW FOR TEN YEAR SEGMENTS

DW = The ratio of (TDW/TF) total dry weather flow to total flow for the given ten-year segment determined by the methodology above

WW = The ratio of (TWW/TF) total wet weather flow to total flow for the given ten-year segment determined by the methodology above

DW_{ACSA} = The ratio of ACSA Dry Weather Flow Projection to Total Dry Weather flow used for the given ten-year segment determined by the methodology above

DW_{CITY} = The ratio of City Dry Weather Flow Projection to Total Dry Weather flow used for the given ten-year segment determined by the methodology above

WW_{ACSA} = The ratio of ACSA Wet Weather Flow Projection to Total Wet Weather flow used for the given ten-year segment determined by the methodology above

WW_{CITY} = The ratio of City Wet Weather Flow Projection to Total Wet Weather flow used for the given ten-year segment determined by the methodology above

FLOW

TDW = Total Dry Weather Flow Projection used for the given ten-year segment determined by the methodology above

TF = Total 2-Year Storm Projected Flow (Peak Flow) or the sum of DW and WW for the given ten-year segment

TWW = Total 2-Year Storm Wet Weather Flow Projection used for the ten-year segment determined by the methodology above.

An example of this calculation for a hypothetical Capacity-Related Wastewater Project is attached hereto as Exhibit D.

7. Data Acquisition (Metering) Plan. Prior to commencement of construction for each Capacity-Related Wastewater Project, RWSA will provide the City and ACSA with a Dry and Wet Weather Flow analysis for the new Project Location, if available, or otherwise develop the data as soon as practicable, recognizing the timing of the development of Wet Weather Flow analysis is weather dependent. Debt Service Charges for each such Project shall be established based upon such analysis until updated from that date as described in Section 4.b above. In the

event a Project needs to proceed and incur costs before the analysis is available, Debt Service Charges in the interim may be based upon a percentage agreed by the City and ACSA, or allocated by the methodology described in Section 10, until the data is available. The cost of such initial analysis and each update to the analysis shall be allocated using the same allocation method used for operational costs as set forth in Section 10 below.

8. Inflow and Infiltration Remediation. RWSA, the City and ACSA shall engage in aggressive cost-effective inflow and infiltration remediation methods, including conducting sewer system evaluation surveys meeting EPA standards; and promptly repair identified defects when repair is more cost-effective than interception and treatment. The City and ACSA agree to continue to diligently pursue the previously set goal of reducing the inflow and infiltration measured in the urban wastewater system in 2006 for a 2-Year Storm by at least twenty-five percent (25%) by 2020.

9. Capacity-Related Wastewater Upgrade or Replacement Projects. In the event a Capacity-Related Wastewater Project requires upgrading or replacement prior to its projected useful life due to projected flows exceeding the amounts projected by the Engineer in the original flow analysis done for the project pursuant to Section 4.a. above (whether due to failure to curtail inflow and infiltration or exceeding growth projections or both), as between the City and ACSA, the party responsible for the excess flows agrees to have the Debt Service Charges for that portion of the additional capacity included in the upgraded or replacement project attributable to such excess flow allocated to it.

10. Operational and Maintenance Charges. Except as otherwise specifically provided herein, the City and ACSA will continue to pay operational and maintenance charges not in RWSA's CIP developed by RWSA to cover costs for routine labor, chemicals, supplies, power,

depreciation, and all other operational and maintenance costs associated with wastewater interception and treatment for the Urban Wastewater System on the basis of their percentage of overall wastewater system flows as has been done since 1999.

WITNESS the following duly authorized signatures and seals:

[SIGNATURES ON FOLLOWING PAGES]

CITY OF CHARLOTTESVILLE

By: _____
Mayor

COMMONWEALTH OF VIRGINIA
CITY/COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of
_____, 2014, by _____.

Notary Public

My commission expires: _____

ID No. _____

ALBEMARLE COUNTY SERVICE AUTHORITY

By: _____
Chairman

COMMONWEALTH OF VIRGINIA
CITY/COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of
_____, 2014, by _____.

Notary Public

My commission expires: _____

ID No. _____

RIVANNA WATER AND SEWER AUTHORITY

By: _____
Chairman

COMMONWEALTH OF VIRGINIA
CITY/COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of
_____, 2014, by _____.

Notary Public

My commission expires: _____
ID No. _____

EXHIBIT A

EXISTING CAPACITY-RELATED WASTEWATER PROJECTS¹

Crozet Flow Equalization Basin (100% of flows attributable to ACSA)

Meadow Creek Interceptor Improvements

Moore's Creek Pump Station and Force Main Upgrade

Moore's Creek WWTP Wet Weather Capacity

Schenks Branch Interceptor Replacement (100% of flows attributable to City)

Rivanna Pump Station

¹All of the projects identified above are capacity-related, have either been completed since 2000 or are contained within the RWSA Capital Improvement Plan for Fiscal Years 2013-2017 adopted February 26, 2013, will have future costs after July 1, 2014 that will require Debt Service Charges, and have not been identified as part of any past executed cost allocation agreement.

EXHIBIT B

EXISTING NON-CAPACITY-RELATED URBAN WASTEWATER PROJECTS

Projects for Assets Used 100% to Serve ACSA

Albemarle-Berkley Interceptor

Crozet Interceptor (Rehabilitation and Repairs)

Crozet Pump Station Automatic Bar Screens

Projects for Assets Used 100% to Serve City

None

Projects for Assets Shared by ACSA and City

Administration Building Repairs (Wastewater Portion)

ATS (Moores Creek WWTP)

Bridge Repairs (Moores Creek WWTP)

Comprehensive Sewer Interceptor Study

Engineering Modular Building Expansion (Wastewater Portion)

Interceptor Sewer and Manhole Repair

Meadow Creek Interceptor Routing Study

Meadow Creek Interceptor Study

Meters for Sanitary Sewer Flow Monitoring

Miscellaneous Repairs to Pipelines Adjacent to Streams

Miscellaneous Wastewater Projects (2004)

Moores Creek (WWTP) Front End Improvements

Moores Creek (WWTP) Lime Tower Rehabilitation

Moore's Creek Improvements (2002)

Moore's Creek WWTP Digester Heating and Mixing Upgrade

Moore's Creek WWTP Odor Control – Phases 1 and 2

Moore's Creek WWTP Upgrade Conversion to ENR (Enhanced Nutrient Removal) Design and Construction

Radio Upgrade (Wastewater Portion)

Rivanna Pump Station Emergency Generator

Rivanna Pump Station Odor Control

SCADA (Moore's Creek WWTP)

Security Improvements (Wastewater)

Trommel Screen – Compost Yard – Moore's Creek WWTP

EXHIBIT C

DRY WEATHER FLOW AND WET WEATHER FLOW TABLES FOR EXISTING CAPACITY-RELATED URBAN WASTEWATER PROJECTS BASED ON GREELEY AND HANSEN ANALYSIS OF 2006 DATA (2010 ENGINEERING REPORT)¹

Crozet Flow Equalization Basin:

All Dry Weather Flow and Wet Weather Flow for all years are projected to be 100% from ACSA. All costs should be allocated to ACSA.

¹ Greeley and Hansen's projections were only made through the year 2060. Projections from 2061 through 2073 (identified in red font) are extrapolations made from the Engineer's data by RWSA.

Meadow Creek Interceptor Improvements

Year	Average Day - Dry Weather Flow (mgd)		Wet Weather (I&I) Flow (mgd)		Total Peaking Flow (mgd)	Total Peaking Flow (mgd)		Total Peaking Flow (mgd)
	ACSA	City	ACSA	City		ACSA	City	
2014	1.7	3.2	7.7	26.5	39.1	9.4	29.7	39.1
2015	1.7	3.2	7.8	26.4	39.1	9.5	29.6	39.1
2016	1.7	3.3	7.8	26.3	39.1	9.5	29.6	39.1
2017	1.8	3.3	7.8	26.1	39.0	9.6	29.4	39.0
2018	1.8	3.3	7.9	26.0	39.0	9.7	29.3	39.0
2019	1.8	3.3	7.9	25.9	38.9	9.7	29.2	38.9
2020	1.8	3.3	7.9	25.7	38.7	9.7	29.0	38.7
2021	1.8	3.4	8.0	25.6	38.8	9.8	29.0	38.8
2022	1.9	3.4	8.0	25.5	38.8	9.9	28.9	38.8
2023	1.9	3.4	8.0	25.3	38.6	9.9	28.7	38.6
2024	1.9	3.4	8.0	25.2	38.5	9.9	28.6	38.5
2025	1.9	3.4	8.0	25.1	38.4	9.9	28.5	38.4
2026	1.9	3.4	8.0	24.9	38.2	9.9	28.3	38.2
2027	1.9	3.4	8.0	24.8	38.1	9.9	28.2	38.1
2028	2.0	3.4	8.0	24.7	38.1	10.0	28.1	38.1
2029	2.0	3.4	8.1	24.5	38.0	10.1	27.9	38.0
2030	2.0	3.4	8.1	24.4	37.9	10.1	27.8	37.9
2031	2.0	3.5	8.1	24.2	37.8	10.1	27.7	37.8
2032	2.0	3.5	8.1	24.1	37.7	10.1	27.6	37.7
2033	2.0	3.5	8.1	24.0	37.6	10.1	27.5	37.6
2034	2.0	3.5	8.1	23.8	37.4	10.1	27.3	37.4
2035	2.1	3.5	8.1	23.7	37.4	10.2	27.2	37.4
2036	2.1	3.5	8.2	23.6	37.4	10.3	27.1	37.4
2037	2.1	3.5	8.2	23.4	37.2	10.3	26.9	37.2
2038	2.1	3.5	8.2	23.3	37.1	10.3	26.8	37.1
2039	2.1	3.5	8.2	23.2	37.0	10.3	26.7	37.0
2040	2.1	3.5	8.2	23.0	36.8	10.3	26.5	36.8
2041	2.1	3.5	8.2	22.9	36.7	10.3	26.4	36.7
2042	2.2	3.6	8.2	22.8	36.8	10.4	26.4	36.8
2043	2.2	3.6	8.2	22.6	36.6	10.4	26.2	36.6
2044	2.2	3.6	8.3	22.5	36.6	10.5	26.1	36.6
2045	2.2	3.6	8.3	22.3	36.4	10.5	25.9	36.4
2046	2.2	3.6	8.3	22.2	36.3	10.5	25.8	36.3
2047	2.2	3.6	8.3	22.1	36.2	10.5	25.7	36.2
2048	2.3	3.6	8.3	21.9	36.1	10.6	25.5	36.1
2049	2.3	3.6	8.3	21.8	36.0	10.6	25.4	36.0
2050	2.3	3.6	8.3	21.7	35.9	10.6	25.3	35.9
2051	2.3	3.6	8.4	21.5	35.8	10.7	25.1	35.8
2052	2.3	3.6	8.4	21.4	35.7	10.7	25.0	35.7
2053	2.3	3.7	8.4	21.3	35.7	10.7	25.0	35.7
2054	2.3	3.7	8.4	21.1	35.5	10.7	24.8	35.5
2055	2.4	3.7	8.4	21.0	35.5	10.8	24.7	35.5
2056	2.4	3.7	8.4	20.8	35.3	10.8	24.5	35.3
2057	2.4	3.7	8.4	20.7	35.2	10.8	24.4	35.2
2058	2.4	3.7	8.4	20.6	35.1	10.8	24.3	35.1
2059	2.4	3.7	8.5	20.4	35.0	10.9	24.1	35.0
2060	2.4	3.7	8.5	20.3	34.9	10.9	24.0	34.9
2061	2.5	3.7	8.5	20.1	34.8	11.0	23.8	34.8
2062	2.5	3.7	8.5	20.0	34.7	11.0	23.7	34.7
2063	2.5	3.8	8.5	19.8	34.6	11.0	23.6	34.6
2064	2.5	3.8	8.5	19.7	34.5	11.0	23.5	34.5
2065	2.5	3.8	8.5	19.6	34.4	11.0	23.4	34.4
2066	2.5	3.8	8.6	19.4	34.3	11.1	23.2	34.3
2067	2.5	3.8	8.6	19.3	34.2	11.1	23.1	34.2
2068	2.6	3.8	8.6	19.2	34.2	11.2	23.0	34.2
2069	2.6	3.8	8.6	19.0	34.0	11.2	22.8	34.0
2070	2.6	3.8	8.6	18.9	33.9	11.2	22.7	33.9
2071	2.6	3.8	8.6	18.8	33.8	11.2	22.6	33.8
2072	2.6	3.8	8.6	18.6	33.6	11.2	22.4	33.6
2073	2.6	3.8	8.6	18.5	33.5	11.2	22.3	33.5

Moores Creek Pumping Station & Force Main Upgrade

Year	Average Day - Dry Weather Flow (mgd)		Wet Weather (I&I) Flow (mgd)		Total Peaking Flow (mgd)	Total Peaking Flow (mgd)		Total Peaking Flow (mgd)
	ACSA	City	ACSA	City		ACSA	City	
2014	2.3	2.3	12.4	9.8	26.8	14.7	12.1	26.8
2015	2.4	2.4	12.7	10.2	27.7	15.1	12.6	27.7
2016	2.5	2.4	12.9	10.6	28.4	15.4	13.0	28.4
2017	2.6	2.5	13.2	11.0	29.3	15.8	13.5	29.3
2018	2.7	2.5	13.4	11.4	30.0	16.1	13.9	30.0
2019	2.7	2.5	13.7	11.8	30.7	16.4	14.3	30.7
2020	2.8	2.6	13.9	12.2	31.5	16.7	14.8	31.5
2021	2.9	2.6	14.0	12.2	31.7	16.9	14.8	31.7
2022	3.0	2.7	14.2	12.1	32.0	17.2	14.8	32.0
2023	3.0	2.7	14.3	12.0	32.0	17.3	14.7	32.0
2024	3.1	2.7	14.3	11.9	32.0	17.4	14.6	32.0
2025	3.1	2.7	14.4	11.8	32.0	17.5	14.5	32.0
2026	3.2	2.8	14.4	11.6	32.0	17.6	14.4	32.0
2027	3.3	2.8	14.5	11.4	32.0	17.8	14.2	32.0
2028	3.3	2.8	14.6	11.3	32.0	17.9	14.1	32.0
2029	3.4	2.9	14.6	11.1	32.0	18.0	14.0	32.0
2030	3.5	2.9	14.7	10.9	32.0	18.2	13.8	32.0
2031	3.5	2.9	14.7	10.8	31.9	18.2	13.7	31.9
2032	3.6	3.0	14.7	10.7	32.0	18.3	13.7	32.0
2033	3.6	3.0	14.8	10.6	32.0	18.4	13.6	32.0
2034	3.7	3.0	14.8	10.5	32.0	18.5	13.5	32.0
2035	3.8	3.0	14.8	10.4	32.0	18.6	13.4	32.0
2036	3.8	3.1	14.8	10.3	32.0	18.6	13.4	32.0
2037	3.9	3.1	14.8	10.2	32.0	18.7	13.3	32.0
2038	4.0	3.1	14.8	10.1	32.0	18.8	13.2	32.0
2039	4.0	3.2	14.8	10.0	32.0	18.8	13.2	32.0
2040	4.1	3.2	14.8	9.9	32.0	18.9	13.1	32.0
2041	4.1	3.2	14.8	9.8	31.9	18.9	13.0	31.9
2042	4.2	3.3	14.7	9.8	32.0	18.9	13.1	32.0
2043	4.3	3.3	14.7	9.7	32.0	19.0	13.0	32.0
2044	4.3	3.3	14.7	9.6	31.9	19.0	12.9	31.9
2045	4.4	3.4	14.7	9.6	32.1	19.1	13.0	32.1
2046	4.4	3.4	14.7	9.5	32.0	19.1	12.9	32.0
2047	4.5	3.4	14.6	9.5	32.0	19.1	12.9	32.0
2048	4.6	3.4	14.6	9.4	32.0	19.2	12.8	32.0
2049	4.6	3.5	14.5	9.4	32.0	19.1	12.9	32.0
2050	4.7	3.5	14.4	9.4	32.0	19.1	12.9	32.0
2051	4.8	3.5	14.4	9.3	32.0	19.2	12.8	32.0
2052	4.8	3.6	14.3	9.3	32.0	19.1	12.9	32.0
2053	4.9	3.6	14.2	9.3	32.0	19.1	12.9	32.0
2054	4.9	3.6	14.1	9.3	31.9	19.0	12.9	31.9
2055	5.0	3.7	14.0	9.3	32.0	19.0	13.0	32.0
2056	5.1	3.7	13.9	9.3	32.0	19.0	13.0	32.0
2057	5.1	3.7	13.8	9.3	31.9	18.9	13.0	31.9
2058	5.2	3.7	13.7	9.3	31.9	18.9	13.0	31.9
2059	5.3	3.8	13.5	9.4	32.0	18.8	13.2	32.0
2060	5.3	3.8	13.4	9.4	31.9	18.7	13.2	31.9
2061	5.4	3.8	13.5	9.5	32.2	18.9	13.3	32.2
2062	5.5	3.9	13.8	9.8	33.0	19.3	13.7	33.0
2063	5.5	3.9	13.8	9.8	33.0	19.3	13.7	33.0
2064	5.6	3.9	14.0	9.8	33.3	19.6	13.7	33.3
2065	5.6	4.0	14.0	10.0	33.6	19.6	14.0	33.6
2066	5.7	4.0	14.3	10.0	34.0	20.0	14.0	34.0
2067	5.8	4.0	14.5	10.0	34.3	20.3	14.0	34.3
2068	5.8	4.1	14.5	10.3	34.7	20.3	14.4	34.7
2069	5.9	4.1	14.8	10.3	35.1	20.7	14.4	35.1
2070	5.9	4.1	14.8	10.3	35.1	20.7	14.4	35.1
2071	6.0	4.1	15.0	10.3	35.4	21.0	14.4	35.4
2072	6.1	4.2	15.3	10.5	36.1	21.4	14.7	36.1
2073	6.1	4.2	15.3	10.5	36.1	21.4	14.7	36.1

Moores Creek WWTP - Wet Weather Capacity

Year	Average Day - Dry Weather Flow (mgd)		Wet Weather (I&I) Flow (mgd)		Total Peaking Flow (mgd)	Total Peaking Flow (mgd)		Total Peaking Flow (mgd)
	ACSA	City	ACSA	City		ACSA	City	
2014	6.0	5.8	27.5	39.0	78.3	33.5	44.8	78.3
2015	6.2	5.9	28.0	39.2	79.3	34.2	45.1	79.3
2016	6.4	5.9	28.4	39.3	80.0	34.8	45.2	80.0
2017	6.6	6.1	28.9	39.4	81.0	35.5	45.5	81.0
2018	6.8	6.1	29.2	39.5	81.6	36.0	45.6	81.6
2019	6.9	6.1	29.7	39.7	82.4	36.6	45.8	82.4
2020	7.1	6.2	30.1	39.8	83.2	37.2	46.0	83.2
2021	7.3	6.2	30.4	39.5	83.4	37.7	45.7	83.4
2022	7.5	6.4	30.8	39.1	83.8	38.3	45.5	83.8
2023	7.6	6.4	31.1	38.8	83.9	38.7	45.2	83.9
2024	7.8	6.4	31.2	38.4	83.8	39.0	44.8	83.8
2025	8.0	6.4	31.5	38.1	84.0	39.5	44.5	84.0
2026	8.2	6.5	31.7	37.6	84.0	39.9	44.1	84.0
2027	8.4	6.6	31.9	37.1	84.0	40.3	43.7	84.0
2028	8.5	6.6	32.2	36.7	84.0	40.7	43.3	84.0
2029	8.7	6.7	32.4	36.3	84.1	41.1	43.0	84.1
2030	8.9	6.7	32.6	35.8	84.0	41.5	42.5	84.0
2031	9.0	6.7	32.8	35.5	84.0	41.8	42.2	84.0
2032	9.2	6.9	33.0	35.1	84.2	42.2	42.0	84.2
2033	9.3	6.9	33.3	34.7	84.2	42.6	41.6	84.2
2034	9.6	6.9	33.4	34.3	84.2	43.0	41.2	84.2
2035	9.8	6.9	33.6	34.0	84.3	43.4	40.9	84.3
2036	9.9	7.0	33.8	33.6	84.3	43.7	40.6	84.3
2037	10.1	7.1	33.9	33.2	84.3	44.0	40.3	84.3
2038	10.3	7.1	34.1	32.8	84.3	44.4	39.9	84.3
2039	10.4	7.2	34.3	32.5	84.4	44.7	39.7	84.4
2040	10.6	7.2	34.5	32.1	84.4	45.1	39.3	84.4
2041	10.7	7.2	34.6	31.7	84.2	45.3	38.9	84.2
2042	10.9	7.4	34.7	31.4	84.4	45.6	38.8	84.4
2043	11.2	7.4	34.9	31.1	84.6	46.1	38.5	84.6
2044	11.3	7.4	35.1	30.7	84.5	46.4	38.1	84.5
2045	11.5	7.5	35.2	30.5	84.7	46.7	38.0	84.7
2046	11.6	7.5	35.4	30.1	84.6	47.0	37.6	84.6
2047	11.8	7.6	35.5	29.8	84.7	47.3	37.4	84.7
2048	12.0	7.6	35.7	29.4	84.7	47.7	37.0	84.7
2049	12.1	7.7	35.8	29.2	84.8	47.9	36.9	84.8
2050	12.3	7.7	35.8	28.9	84.7	48.1	36.6	84.7
2051	12.5	7.7	36.0	28.5	84.7	48.5	36.2	84.7
2052	12.7	7.9	36.0	28.2	84.8	48.7	36.1	84.8
2053	12.9	7.9	36.1	28.0	84.9	49.0	35.9	84.9
2054	13.0	7.9	36.2	27.7	84.8	49.2	35.6	84.8
2055	13.2	8.0	36.3	27.5	85.0	49.5	35.5	85.0
2056	13.4	8.0	36.3	27.2	84.9	49.7	35.2	84.9
2057	13.5	8.1	36.4	26.9	84.9	49.9	35.0	84.9
2058	13.7	8.1	36.5	26.6	84.9	50.2	34.7	84.9
2059	13.9	8.2	36.4	26.5	85.0	50.3	34.7	85.0
2060	14.1	8.2	36.4	26.2	84.9	50.5	34.4	84.9
2061	14.3	8.2	36.6	26.0	85.1	50.9	34.2	85.1
2062	14.5	8.4	37.1	26.0	86.0	51.6	34.4	86.0
2063	14.6	8.4	37.2	25.8	86.0	51.8	34.2	86.0
2064	14.8	8.4	37.6	25.5	86.3	52.4	33.9	86.3
2065	14.9	8.5	37.8	25.4	86.6	52.7	33.9	86.6
2066	15.1	8.5	38.2	25.2	87.0	53.3	33.7	87.0
2067	15.3	8.6	38.5	24.9	87.3	53.8	33.5	87.3
2068	15.5	8.7	38.5	25.0	87.7	54.0	33.7	87.7
2069	15.7	8.7	39.0	24.7	88.1	54.7	33.4	88.1
2070	15.8	8.7	39.1	24.5	88.1	54.9	33.2	88.1
2071	16.0	8.7	39.4	24.2	88.3	55.4	32.9	88.3
2072	16.2	8.9	39.8	24.2	89.1	56.0	33.1	89.1
2073	16.3	8.9	39.9	24.0	89.1	56.2	32.9	89.1

Rivanna Pump Station and Interceptor Tunnel

Year	Average Day - Dry Weather Flow (mgd)		Wet Weather (I&I) Flow (mgd)		Total Peaking Flow (mgd)	Total Peaking Flow (mgd)		Total Peaking Flow (mgd)
	ACSA	City	ACSA	City		ACSA	City	
2014	3.7	3.5	15.1	29.2	51.5	18.8	32.7	51.5
2015	3.8	3.5	15.3	29.0	51.6	19.1	32.5	51.6
2016	3.9	3.5	15.5	28.7	51.6	19.4	32.2	51.6
2017	4.0	3.6	15.7	28.4	51.7	19.7	32.0	51.7
2018	4.1	3.6	15.8	28.1	51.6	19.9	31.7	51.6
2019	4.2	3.6	16.0	27.9	51.7	20.2	31.5	51.7
2020	4.3	3.6	16.2	27.6	51.7	20.5	31.2	51.7
2021	4.4	3.6	16.4	27.3	51.7	20.8	30.9	51.7
2022	4.5	3.7	16.6	27.0	51.8	21.1	30.7	51.8
2023	4.6	3.7	16.8	26.8	51.9	21.4	30.5	51.9
2024	4.7	3.7	16.9	26.5	51.8	21.6	30.2	51.8
2025	4.9	3.7	17.1	26.3	52.0	22.0	30.0	52.0
2026	5.0	3.7	17.3	26.0	52.0	22.3	29.7	52.0
2027	5.1	3.8	17.4	25.7	52.0	22.5	29.5	52.0
2028	5.2	3.8	17.6	25.4	52.0	22.8	29.2	52.0
2029	5.3	3.8	17.8	25.2	52.1	23.1	29.0	52.1
2030	5.4	3.8	17.9	24.9	52.0	23.3	28.7	52.0
2031	5.5	3.8	18.1	24.7	52.1	23.6	28.5	52.1
2032	5.6	3.9	18.3	24.4	52.2	23.9	28.3	52.2
2033	5.7	3.9	18.5	24.1	52.2	24.2	28.0	52.2
2034	5.9	3.9	18.6	23.8	52.2	24.5	27.7	52.2
2035	6.0	3.9	18.8	23.6	52.3	24.8	27.5	52.3
2036	6.1	3.9	19.0	23.3	52.3	25.1	27.2	52.3
2037	6.2	4.0	19.1	23.0	52.3	25.3	27.0	52.3
2038	6.3	4.0	19.3	22.7	52.3	25.6	26.7	52.3
2039	6.4	4.0	19.5	22.5	52.4	25.9	26.5	52.4
2040	6.5	4.0	19.7	22.2	52.4	26.2	26.2	52.4
2041	6.6	4.0	19.8	21.9	52.3	26.4	25.9	52.3
2042	6.7	4.1	20.0	21.6	52.4	26.7	25.7	52.4
2043	6.9	4.1	20.2	21.4	52.6	27.1	25.5	52.6
2044	7.0	4.1	20.4	21.1	52.6	27.4	25.2	52.6
2045	7.1	4.1	20.5	20.9	52.6	27.6	25.0	52.6
2046	7.2	4.1	20.7	20.6	52.6	27.9	24.7	52.6
2047	7.3	4.2	20.9	20.3	52.7	28.2	24.5	52.7
2048	7.4	4.2	21.1	20.0	52.7	28.5	24.2	52.7
2049	7.5	4.2	21.3	19.8	52.8	28.8	24.0	52.8
2050	7.6	4.2	21.4	19.5	52.7	29.0	23.7	52.7
2051	7.7	4.2	21.6	19.2	52.7	29.3	23.4	52.7
2052	7.9	4.3	21.7	18.9	52.8	29.6	23.2	52.8
2053	8.0	4.3	21.9	18.7	52.9	29.9	23.0	52.9
2054	8.1	4.3	22.1	18.4	52.9	30.2	22.7	52.9
2055	8.2	4.3	22.3	18.2	53.0	30.5	22.5	53.0
2056	8.3	4.3	22.4	17.9	52.9	30.7	22.2	52.9
2057	8.4	4.4	22.6	17.6	53.0	31.0	22.0	53.0
2058	8.5	4.4	22.8	17.3	53.0	31.3	21.7	53.0
2059	8.6	4.4	22.9	17.1	53.0	31.5	21.5	53.0
2060	8.8	4.4	23.0	16.8	53.0	31.8	21.2	53.0
2061	8.9	4.4	23.1	16.5	52.9	32.0	20.9	52.9
2062	9.0	4.5	23.3	16.2	53.0	32.3	20.7	53.0
2063	9.1	4.5	23.4	16.0	53.0	32.5	20.5	53.0
2064	9.2	4.5	23.6	15.7	53.0	32.8	20.2	53.0
2065	9.3	4.5	23.8	15.4	53.0	33.1	19.9	53.0
2066	9.4	4.5	23.9	15.2	53.0	33.3	19.7	53.0
2067	9.5	4.6	24.0	14.9	53.0	33.5	19.5	53.0
2068	9.7	4.6	24.0	14.7	53.0	33.7	19.3	53.0
2069	9.8	4.6	24.2	14.4	53.0	34.0	19.0	53.0
2070	9.9	4.6	24.3	14.2	53.0	34.2	18.8	53.0
2071	10.0	4.6	24.4	13.9	52.9	34.4	18.5	52.9
2072	10.1	4.7	24.5	13.7	53.0	34.6	18.4	53.0
2073	10.2	4.7	24.6	13.5	53.0	34.8	18.2	53.0

Schenks Branch Interceptor Replacement:

All Dry Weather Flow and Wet Weather Flow for all years are projected to be 100% from City. All costs should be allocated to City.

EXHIBIT D

EXAMPLE OF APPLICATION OF TERMS OF AGREEMENT TO A HYPOTHETICAL CAPACITY RELATED WASTEWATER PROJECT

- Project: New Alpha Creek Pump Station (ACPS)
- Engineer’s Flow Projections Made in 2015, 2020, 2025, 2030, 2035, 2040, 2045, 2050
- First Identified as future project in 5-Yr CIP in 2015-16; estimated \$8.8 million
- Designed in 2018
- Constructed in 2019 and 2020
- \$20 million in 30-year revenue bonds issued in June 2019 for multiple projects with an interest rate of 4%, equal annual P & I payments to maturity, with \$8 million of the bond proceeds budgeted for ACPS

BUDGETED PROJECT EXPENSE TABLE²

Fiscal Year	Cash or Reserves	Debt Service (40% of \$20 million bond)	Fiscal Year	Cash or Reserves	Debt Service (40% of \$20 million bond)
2018	\$ 340,000.00		2034		\$462,640.79
2019	\$ 460,000.00		2035		\$462,640.79
2020		\$462,640.79	2036		\$462,640.79
2021		\$462,640.79	2037		\$462,640.79
2022		\$462,640.79	2038		\$462,640.79
2023		\$462,640.79	2039		\$462,640.79
2024		\$462,640.79	2040		\$462,640.79
2025		\$462,640.79	2041		\$462,640.79
2026		\$462,640.79	2042		\$462,640.79
2027		\$462,640.79	2043		\$462,640.79
2028		\$462,640.79	2044		\$462,640.79
2029		\$462,640.79	2045		\$462,640.79
2030		\$462,640.79	2046		\$462,640.79
2031		\$462,640.79	2047		\$462,640.79
2032		\$462,640.79	2048		\$462,640.79
2033		\$462,640.79	2049		\$462,640.79
				\$ 800,000.00	\$13,879,223.79

² In reality, the project budget is updated annually as actual expenses always vary from estimated expenses. Pursuant to the Four Party Agreement, the Authority also may budget for surpluses in some years and deficits in others to stabilize changes in wholesale rates. For purposes of example, those complexities are not shown here.

ENGINEER'S FLOW PROJECTIONS IN 2015

Fiscal Year	ACSA		City		Fiscal Year	ACSA		City	
	Dry Weather	Wet Weather	Dry Weather	Wet Weather		Dry Weather	Wet Weather	Dry Weather	Wet Weather
2021	1.0	3.4	1.9	13.0	2054	2.1	6.7	2.3	9.9
2022	1.0	3.5	1.9	12.9	2055	2.1	6.8	2.3	9.8
2023	1.0	3.6	1.9	12.8	2056	2.1	6.9	2.3	9.8
2024	1.1	3.7	1.9	12.7	2057	2.2	7.0	2.3	9.7
2025	1.1	3.8	1.9	12.6	2058	2.2	7.1	2.3	9.7
2026	1.1	3.9	1.9	12.5	2059	2.2	7.2	2.3	9.6
2027	1.2	4.0	1.9	12.4	2060	2.3	7.3	2.3	9.6
2028	1.2	4.1	1.9	12.3	2061	2.3	7.4	2.4	9.5
2029	1.2	4.2	2.0	12.2	2062	2.3	7.5	2.4	9.5
2030	1.3	4.3	2.0	12.1	2063	2.4	7.6	2.4	9.4
2031	1.3	4.4	2.0	12.0	2064	2.4	7.7	2.4	9.4
2032	1.3	4.5	2.0	11.9	2065	2.4	7.8	2.4	9.3
2033	1.4	4.6	2.0	11.8	2066	2.5	7.9	2.4	9.3
2034	1.4	4.7	2.0	11.7	2067	2.5	8.0	2.4	9.2
2035	1.4	4.8	2.0	11.6	2068	2.5	8.1	2.4	9.2
2036	1.5	4.9	2.0	11.5	2069	2.6	8.2	2.5	9.1
2037	1.5	5.0	2.1	11.4	2070	2.6	8.3	2.5	9.1
2038	1.5	5.1	2.1	11.3	2071	2.6	8.4	2.5	9.0
2039	1.6	5.2	2.1	11.2	2072	2.7	8.5	2.5	9.0
2040	1.6	5.3	2.1	11.1	2073	2.7	8.6	2.5	8.9
2041	1.6	5.4	2.1	11.0	2074	2.7	8.7	2.5	8.9
2042	1.7	5.5	2.1	10.9	2075	2.8	8.8	2.5	8.8
2043	1.7	5.6	2.1	10.8	2076	2.8	8.9	2.5	8.8
2044	1.7	5.7	2.1	10.7	2077	2.8	9.0	2.6	8.7
2045	1.8	5.8	2.2	10.6	2078	2.9	9.1	2.6	8.7
2046	1.8	5.9	2.2	10.5	2079	2.9	9.2	2.6	8.7
2047	1.8	6.0	2.2	10.4	2080	2.9	9.3	2.6	8.7
2048	1.9	6.1	2.2	10.3					
2049	1.9	6.2	2.2	10.2	60-Year Avg	2.0	6.4	2.2	10.4
2050	1.9	6.3	2.2	10.1					
2051	2.0	6.4	2.2	10.0	1st Segment Avg (2021-30)	1.1	3.9	1.9	12.6
2052	2.0	6.5	2.2	10.0					
2053	2.0	6.6	2.3	9.9					

Debt Service Charges for FY 2018 and 2019 (Cash or Reserves) using 2015 Engineer's projections:

TDW for average of entire 60-year projection = 4.2 mgd
 TF for average of entire 60-year projection = 21.0 mgd
 TWW for average of entire 60-year projection = 16.8 mgd
 $DW = TDW/TF = 4.2/21.0 = 20\%$
 $WW = TWW/TF = 16.8/21.0 = 80\%$
 $DW_{ACSA} = 2.0/4.2 = 48\%$
 $DW_{CITY} = 2.2/4.2 = 52\%$

$$WW_{ACSA} = 6.4/16.8 = 38\%$$

$$WW_{CITY} = 10.4/16.8 = 62\%$$

For FY 2018 Total Debt Service Charges = \$340,000.00

$$D_{DRY} = 340000 \times 20\% = \$68,000$$

$$D_{WET} = 340000 \times 80\% = \$272,000$$

$$D_{ACSA} = [(\$68,000 \times 48\%) + (\$272,000 \times 38\%)] = \$32,640 + \$103,360 = \$136,000$$

$$D_{CITY} = [(\$68,000 \times 52\%) + (\$272,000 \times 62\%)] = \$35,360 + \$168,640 = \$204,000$$

For FY 2019 Total Debt Service Charges = \$460,000.00

$$D_{DRY} = 460000 \times 20\% = \$92,000$$

$$D_{WET} = 460000 \times 80\% = \$368,000$$

$$D_{ACSA} = [(\$92,000 \times 48\%) + (\$368,000 \times 38\%)] = \$44,160 + \$139,840 = \$184,000$$

$$D_{CITY} = [(\$92,000 \times 52\%) + (\$368,000 \times 62\%)] = \$47,840 + \$228,160 = \$276,000$$

Debt Service Charges for FY 2020 (Debt Payment) using 2015 Engineer's projections:

TDW for average of 2021-30 10-year segment projection = 3.0 mgd

TF for average of 2021-30 10-year projection = 19.5 mgd

TWW for average of 2021-30 10-year projection = 16.5 mgd

$$DW = TDW/TF = 3.0/19.5 = 16\%$$

$$WW = TWW/TF = 16.5/19.5 = 84\%$$

$$DW_{ACSA} = 1.1/3.0 = 37\%$$

$$DW_{CITY} = 1.9/3.0 = 63\%$$

$$WW_{ACSA} = 3.9/16.5 = 24\%$$

$$WW_{CITY} = 12.6/16.5 = 76\%$$

For FY 2020 Total Debt Service Charges = \$462,640.79

$$D_{DRY} = 462,640.79 \times 16\% = \$74,022.53$$

$$D_{WET} = 462,640.79 \times 84\% = \$388,618.30$$

$$D_{ACSA} = [(\$74,022.53 \times 37\%) + (\$388,618.30 \times 24\%)] = \$27,388.34 + \$93,268.39 = \$120,656.73$$

$$D_{CITY} = [(\$74,022.53 \times 63\%) + (\$388,618.30 \times 76\%)] = \$46,634.19 + \$295,349.91 = \$341,894.06$$

ENGINEER'S FLOW PROJECTIONS IN 2020³

Fiscal Year	ACSA		City		Fiscal Year	ACSA		City	
	Dry Weather	Wet Weather	Dry Weather	Wet Weather		Dry Weather	Wet Weather	Dry Weather	Wet Weather
2021	0.9	3.6	1.9	12.8	2034	1.3	4.8	2.0	11.5
2022	0.9	3.6	1.9	12.7	2035	1.3	4.9	2.0	11.4
2023	1.0	3.7	1.9	12.6	2036	1.4	5.0	2.0	11.3
2024	1.0	3.8	1.9	12.5	2037	1.4	5.1	2.1	11.2
2025	1.0	3.9	1.9	12.4	2038	1.4	5.2	2.1	11.1
2026	1.0	4.0	1.9	12.3	2039	1.5	5.3	2.1	11.0
2027	1.1	4.1	1.9	12.2	2040	1.5	5.4	2.1	10.9
2028	1.1	4.2	1.9	12.1	1st Segment Avg (2021-30)	1.0	4.0	1.9	12.4
2029	1.1	4.3	2.0	12.0					
2030	1.2	4.4	2.0	11.9	2nd Segment Avg (2031-40)	1.4	5.0	2.0	11.4
2031	1.2	4.5	2.0	11.8					
2032	1.2	4.6	2.0	11.7					
2033	1.3	4.7	2.0	11.6					

Debt Service Charges for FY 2021 - 2024 (Debt Payment) using 1st Segment of 2020 Engineer's projections:

TDW for average of 2021-30 10-year segment projection = 2.9 mgd

TF for average of 2021-30 10-year projection = 19.3 mgd

TWW for average of 2021-30 10-year projection = 16.4 mgd

DW = TDW/TF = 2.9/19.3 = 15%

WW = TWW/TF = 16.4/19.3 = 85%

DW_{ACSA} = 1.0/2.9 = 34%

DW_{CITY} = 1.9/2.9 = 66%

WW_{ACSA} = 4.0/16.4 = 24%

WW_{CITY} = 12.4/16.4 = 76%

For FY 2021-24 Total Debt Service Charges = \$462,640.79

D_{DRY} = 462,640.79 x 15% = \$69,396.12

D_{WET} = 462,640.79 x 85% = \$393,244.67

D_{ACSA} = [(\$69,396.12 x 34%) + (\$393,244.67 x 24%)] = \$23,594.68 + \$94,378.72
= \$117,973.40

D_{CITY} = [(\$69,396.12 x 66%) + (\$393,244.67 x 76%)] = \$45,801.44 + 298,865.95 =
\$344,667.39

³ The Engineer's flow projections in 2020 will cover a sixty year period, but for purposes of allocating debt service charges for the new Alpha Creek Pump Station, only the first two segments (2021-2030 and 2031-2040) are actually utilized. For this example, only the first two segments are shown.

Debt Service Charges for FY 2025 (Debt Payment) using 2nd Segment of 2020 Engineer's projections:

TDW for average of 2031-40 10-year segment projection = 3.4 mgd

TF for average of 2031-40 10-year projection = 19.8 mgd

TWW for average of 2031-40 10-year projection = 16.4 mgd

DW = TDW/TF = 3.4/19.8 = 17%

WW = TWW/TF = 16.4/19.8 = 83%

DW_{ACSA} = 1.4/3.4 = 41%

DW_{CITY} = 2.0/3.4 = 59%

WW_{ACSA} = 5.0/16.4 = 30%

WW_{CITY} = 11.4/16.4 = 70%

For FY 2025 Total Debt Service Charges = \$462,640.79

D_{DRY} = 462,640.79 x 17% = \$78,648.93

D_{WET} = 462,640.79 x 83% = \$383,991.86

D_{ACSA} = [(\$78,648.93 x 41%) + (\$383,991.86 x 30%)] = \$32,246.06 + \$115,197.56
= \$147,443.62

D_{CITY} = [(\$78,648.93 x 59%) + (\$383,991.86 x 70%)] = \$46,402.87 + 268,794.30 =
\$315,197.17

Calculations of Debt Service Charges continue by the method shown above for the remainder of the term of debt payments. The year of the Engineer's Projections⁴ used and the Segment used for each further year of Debt Service Charges is shown in the table at the top of the next page.

⁴ As stated in this Agreement, the date projections are published may be necessarily delayed if abnormally dry weather prevents the system measurement of flow from wet weather events sufficient to approximate the 2-Year storm with reasonably high confidence, in the judgment of the "third-party" Engineer.

Fiscal Year	Sequential Year of Debt Payment	Year of Engineer's Flow Projections Used	Segment Used
2020	1st	2015	1st (2021-2030)
2021	2nd	2020	1st (2021-2030)
2022	3rd	2020	1st (2021-2030)
2023	4th	2020	1st (2021-2030)
2024	5th	2020	1st (2021-2030)
2025	6th	2020	2nd (2031-2040)
2026	7th	2025	2nd (2031-2040)
2027	8th	2025	2nd (2031-2040)
2028	9th	2025	2nd (2031-2040)
2029	10th	2025	2nd (2031-2040)
2030	11th	2025	3rd (2041-2050)
2031	12th	2030	3rd (2041-2050)
2032	13th	2030	3rd (2041-2050)
2033	14th	2030	3rd (2041-2050)
2034	15th	2030	3rd (2041-2050)
2035	16th	2030	4th (2051-2060)
2036	17th	2035	4th (2051-2060)
2037	18th	2035	4th (2051-2060)
2038	19th	2035	4th (2051-2060)
2039	20th	2035	4th (2051-2060)
2040	21st	2035	5th (2061-2070)
2041	22nd	2040	5th (2061-2070)
2042	23rd	2040	5th (2061-2070)
2043	24th	2040	5th (2061-2070)
2044	25th	2040	5th (2061-2070)
2045	26th	2040	6th (2071-2080)
2046	27th	2045	6th (2071-2080)
2047	28th	2045	6th (2071-2080)
2048	29th	2045	6th (2071-2080)
2049	30th	2045	6th (2071-2080)

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Rivanna Water & Sewer Authority
Rivanna Solid Waste Authority
695 Moores Creek Lane
Charlottesville, Virginia 22902-9016
434.977.2970 • 434.293.8858 Fax
www.rivanna.org

MEMORANDUM

**TO: THE HONORABLE ALBEMARLE COUNTY SUPERVISORS
THE HONORABLE MAYOR AND CITY COUNCIL**

**FROM: THOMAS L. FREDERICK, EXECUTIVE DIRECTOR
RIVANNA WATER & SEWER AUTHORITY
RIVANNA SOLID WASTE AUTHORITY**

SUBJECT: QUARTERLY UPDATE

DATE: MARCH 4, 2014

I am scheduled to provide a quarterly briefing to the Board of Supervisors in March 2014 and to City Council at a date to be determined. I can cover whatever topics Supervisors or Councilors are interested in, but will start with the following outline:

1. Water Treatment Plant Granular Activated Carbon Improvements: The Hybrid GAC option was selected by the RWSA Board in December and design is moving forward. A Risk Reduction Plan was further approved by the RWSA Board in January, which will use powdered activated carbon to meet EPA Stage 2 compliance until the new Granular Activated Carbon facilities are on-line. Powdered carbon performs a similar function to GAC, but is not as efficient for two reasons: it is used once and then settles with the water plant sludge; and it is used at the front end of the water plant process instead of following the conventional filters. The convenience of powdered carbon is that it does not require GQAC vessels to be place, making it a convenient step. Powdered carbon for Stage 2 will need to be in effect in November 2014 and is the key reason for a wholesale rate increase for Urban water in FY 2014-15.
2. Capital Improvement Plan: The RWSA Board approved a new five-year CIP in January. As my December quarterly report indicated, our overall CIP is now getting smaller than the immediate previous year, and the focus of our capital improvement needs is shifting from the wastewater system to the aging Water Treatment Plants. The Rivanna Pump Station replacement and the Schenks Branch Interceptor replacement are the last two projects in progress from a long list of wastewater needs. As these final projects come on line, we can be proud of an enormous success that has taken our wastewater system from broken down to “world class” within a 10-15 year span. Mike Gaffney’s leadership as Chair has made an enormous contribution to that success.
3. Ragged Mountain Dam: Construction has slowed substantially during the winter, as the soil compaction process that makes an earthen dam does not work during sub-freezing

temperatures and frequent wet weather. We now expect the project completion to be in the May or June 2014 time frame instead of March.

4. Cost Share Agreements: RWSA is providing technical support for an on-going effort by the City and ACSA to develop a more comprehensive agreement for how they are to divide the costs of RWSA capital projects for the wastewater system, to include the new Rivanna Pump Station. The negotiations are being mediated by a representative of The McCammon Group. At present the Council and ACSA are deliberating the terms of a possible settlement.

5. Ivy Materials Utilization Center: The RSWA Board agreed in January with the County's request to extend the Ivy and McIntire agreements through June 30, 2015. We understand the County is initiating discussions of its long-term solid waste goals, to include the extent to which such plan may be regional in scope or more simply a County plan. RSWA staff and County staff met with DEQ last week and learned that DEQ will require a written plan by April 1, 2015 which will either call for closure of the Ivy Transfer Station by June 30, 2015 or a clear written plan and schedule on the implementation of new facilities to replace the Ivy station. DEQ clarified that the infrastructure built at Ivy in the late 1990s was temporary at best, based upon unique circumstances, and never intended by DEQ to become permanent; furthermore the existing equipment requires more labor to operate properly due to its limitations.

cc: RWSA Board of Directors
RSWA Board of Directors

**CITY OF CHARLOTTESVILLE, VIRGINIA.
CITY COUNCIL AGENDA.**



Agenda Date:	March 17, 2014
Action Required:	Approve appropriation
Presenter:	Diane Kuknyo, Director, Department of Social Services
Staff Contacts:	Laura Morris, Chief of Administration, Department of Social Services Diane Kuknyo, Director, Department of Social Services
Title:	Appropriation for Salary Alignment and Office Space Furnishings - \$211,490

Background: The Federal government has recently changed the methodology used for the reporting of Federal Pass-through expenditures for social services programs. This change increases the annual administration base budgets for a handful of local social services departments, including the Charlottesville Department of Social Services (C.D.S.S.). For fiscal year 2014, C.D.S.S. has received an additional \$196,852 due to the methodology change. Additionally, the department has received \$14,638 for F.A.M.I.S. (Family Access to Medical Insurance Security) case transfer. Currently, F.A.M.I.S. cases are administered by the Virginia Department of Social Services; but are being transitioned back to the local departments of social services.

Discussion: The department plans to use the additional funding to decrease staff turnover by bringing staff salaries more in line with local competitors and towards renovations and furnishings for additional office and meeting space on the 1st floor of City Hall Annex.

Retaining qualified staff increases productivity, morale, and positive outcomes for the people we serve. It also decreases training costs, caseloads, and stress on all staff.

The department does not have adequate space to serve citizens. Current office space configurations do not promote confidentiality and staff often need to go offsite to have meetings with clients and community partners. With the additional meeting and office space on the 1st floor of City Hall Annex, more staff will be able to work in offices versus cubicles. Additionally more meetings will be able to held in-house which saves money and time and increases productivity.

Community Engagement: Department staff work directly with citizens to provide social services, protect vulnerable children and adults, and promote self sufficiency.

Alignment with City Council's Vision and Priority Areas: Approval of this agenda item aligns with Council's vision for the City of Charlottesville to **support economic sustainability and to be a community of mutual respect.**

Budgetary Impact: The request has no impact on the General Fund.

Recommendation: Approval and appropriation of these funds.

Alternatives: If not appropriated, the funds will need to be returned to the Virginia Department of Social Services.

APPROPRIATION.
Appropriation for Salary Alignment and Office Space Furnishings.
\$211,490.

WHEREAS, The Charlottesville Department of Social Services has received additional funding in the amount of \$211,490 due to a change in the methodology for reporting federal pass-through expenditures.

NOW, THEREFORE BE IT RESOLVED by the Council of the City of Charlottesville, Virginia, that the sum of \$211,490 is hereby appropriated in the following manner:

Revenue – \$211,490

Fund: 212 Cost Center: 9900000000 G/L Account: 430080

Expenditures - \$211,490

Fund: 212	Cost Center: 3301001000	G/L Account: 510010	Amount: \$3,598.40
Fund: 212	Cost Center: 3301002000	G/L Account: 510010	Amount: \$227.83
Fund: 212	Cost Center: 3301003000	G/L Account: 510010	Amount: \$1,764.99
Fund: 212	Cost Center: 3301004000	G/L Account: 510010	Amount: \$219.87
Fund: 212	Cost Center: 3301005000	G/L Account: 510010	Amount: \$3,808.89
Fund: 212	Cost Center: 3301007000	G/L Account: 510010	Amount: \$19.70
Fund: 212	Cost Center: 3301008000	G/L Account: 510010	Amount: \$37,761.12
Fund: 212	Cost Center: 3301009000	G/L Account: 510010	Amount: \$248.78
Fund: 212	Cost Center: 3301009000	G/L Account: 510010	Amount: \$1,662.16
Fund: 212	Cost Center: 3301013000	G/L Account: 510010	Amount: \$562.01
Fund: 212	Cost Center: 3343006000	G/L Account: 510030	Amount: \$22.22
Fund: 212	Cost Center: 3301001000	G/L Account: 599999	Amount: \$161,594.03

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Total: \$211,490

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**CITY OF CHARLOTTESVILLE, VIRGINIA
CITY COUNCIL AGENDA**



Agenda Date: March 17, 2014

Action Required: Yes (One Reading Resolution)

Presenter: Chris Engel, CEcD, Director of Economic Development

Staff Contacts: Chris Engel, CEcD, Director of Economic Development
Maurice Jones, City Manager

Title: **Virginia Produced - Planning Grant Support**

Background: The Virginia Department of Agriculture and Consumer Services (VDACS) administers the Agriculture and Forestry Industries Development Fund (AFID) Planning Grant program. The program is designed to encourage efforts by local governments to support their agriculture and forestry based businesses. Planning grants can be used to fund feasibility studies, business plans and other predevelopment work for projects that will have a significant and lasting positive impact on the local agriculture sector. VDACS can award up to \$35,000 to joint locality projects, and the grants require a one-to-one public match. Planning grant proposals are submitted by political subdivisions, and must identify a board/committee/group with expertise in the relevant areas; including the affected agricultural and forestry sectors.

Discussion: The City and County of Albemarle have been requested to jointly support the local match for a planning grant that explores the feasibility of a business model and a facility that would have job creation benefits and increase demand for local agricultural products.

The proposed project consists of a Phase 2 business planning process for a flash freezing and light food processing hub, building on a feasibility study already completed under auspices of the Jefferson Area Board for Aging (JABA). The resulting business entity would collaborate with the Local Food Hub (LFH) in sourcing local produce, and distributing lightly processed food products to institutional customers such as the University of Virginia (U.Va.) and Virginia Agencies on Aging (AAAs), and specialty grocery retail stores. As envisioned in the feasibility study and by the project team, a light processing and flash freezing operation would open new market outlets for area farmers to sell lesser-grade produce that isn't fit for retail sale, due to bruising, blemishing and other surface defects. Further, the project would create light food processing jobs for those being left behind in the City of Charlottesville, while supporting incremental job creation on farms themselves; and provide anchor institutions such as U.Va., AAAs and Virginia household consumers with year-round access to locally-sourced, nutrient-

rich foods. This effort is supported by a diverse group of stakeholders that includes LFH, Homegrown Virginia and the Charlottesville Works Initiative.

The purpose of the Phase 2 planning process is to produce a current, actionable business plan that serves as the basis for a "Go/No-Go" decision by key project stakeholders on constituting a state-scale flash freezing and light processing facility, building upon the USDA-supported work already completed by JABA.

Community Engagement: This effort is supported by a diverse group of stakeholders that includes the Local Food Hub, Homegrown Virginia and the Charlottesville Works Initiative. The effort further builds on background research and preliminary assessment and forecasting conducted in 2010-11 by the Jefferson Area Board for Aging (JABA), supported by USDA, which was focused on the possibility of producing flash frozen foods for low and moderate-income seniors.

Alignment with City Council's Vision and Priority Areas: Approval of this agenda item aligns directly with Council's vision for **Economic Sustainability** for the City of Charlottesville and contributes to its 2012-2014 priority to reduce poverty by increasing employment among less skilled and educated residents. The project also aligns with a key goal in the *Growing Opportunity* report of creating new semi-skilled jobs in the city.

Budgetary Impact: If the planning grant is approved by VDACS the local match will be triggered in the amount of \$17,500. This will reduce the available balance in the City's Strategic Investment Fund by the same amount.

Recommendation: After reviewing the project and the planning grant application the Office of Economic Development believes that the project has the potential to accrue significant benefits to the City. City Staff recommends approval of the resolution.

Alternatives: City Council may adopt the Resolution or decline to do so.

Attachments: None.

RESOLUTION
Virginia Produced - Planning Grant Support
\$17,500.00

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Charlottesville, Virginia that the sum of up to \$17,500.00 is hereby paid from currently appropriated funds in the Strategic Investment Fund account in the Capital Projects Fund as matching funds to support a Phase 2 feasibility study on behalf of the Local Food Hub and the Virginia Produced program:

Fund: 425

WBS Element: P-00167

G/L Account: 599999

BE IT FURTHER RESOLVED, that funding will be released once Virginia Department of Agriculture and Consumer Services funding is confirmed and a Memorandum of Understanding is executed between the City of Charlottesville and VDACS.

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