ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: FY 2016 Capital Improvement Program (CIP)	**AGENDA DATE:** April 21, 2016
STAFF CONTACT(S)/PREPARER: Peter C. Gorham, P.E., Director of Engineering	**CONSENT AGENDA:** **ACTION:** ■ **INFORMATION:** ■ **ATTACHMENTS:** YES

BACKGROUND: Monthly CIP Memo summarizing changes to the CIP Schedule, status report on active CIP Projects, list of Active Private Development Projects and revised CIP Schedule. The proposed CIP Schedule has been revised by removing FY 2015 and including FY 2017.

DISCUSSION:

- Schedule changes for three projects.
- Addition of seven new CIP Projects, all of which are part of the proposed FY 2017 CIP Budget.
- Questions about current status of active CIP Projects.

BUDGET IMPACT: None.

RECOMMENDATIONS: None.

BOARD ACTION REQUESTED: Approval of the Consent Agenda.

ATTACHMENTS:

- List of CIP schedule changes
- Monthly CIP Report
- List of Active Private Development Projects
- Revised CIP Schedule

Albemarle County Service Authority (ACSA)

CIP Schedule Revisions
April 2016

1. The construction phase of the Ivy Road – Flordon Water Connection Project has been extended to April 2016.

2. The construction phase of the Key West - Dunlora Water Connection Project has been extended to February 2017.

3. The construction phase of the Automatic Flushing Assemblies Project has been extended to August 2016.

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Albemarle County Service Authority (ACSA)
Capital Improvement Project Report
April 2016

a) **Facility Improvements – Security Upgrades/Warehouse (Account Code 1613-100):** This project will consist of security upgrades to the Main Office Building and the Maintenance Area including additional cameras, additional card-secured doors, upgrades to computer network wiring and a renovated Customer Service counter. Also included in this project is the replacement of deteriorating doors on the Maintenance Warehouse.

11/10/15: A kick-off meeting was held on October 14, 2015 to discuss the preparation of Customer Service counter redesign conceptual drawings and three options were reviewed with the architect on November 4, 2015. One concept design was eliminated and the two remaining options are being revised based upon ACSA staff comments. Work has begun on the computer network wiring upgrades with cable hangers being installed in the ceilings.

12/8/15: A meeting with the architect and ACSA staff was held on December 8, 2015 to choose the final concept for the new Customer Service counter and work on the design has begun. JRC continues to install new wiring for the computer network throughout the Main Office Building.

1/12/16: The installation of the new wiring for the computer network throughout the Main Office Building has been completed and tested. It is anticipated the new system will be placed in service the week of January 11, 2016. Additional security cameras are being installed in the Main Office Building and Warehouse. Two small entry doors in the Warehouse that were deteriorating are being replaced by ACSA staff.

2/9/16: The new computer network is now in service. JRC continues to install additional security cameras and has begun setting more motion detectors in various parts of the Operations Center. The two small entry doors in the Warehouse have been replaced. The mechanical sub-consultant for Grimm and Parker conducted a site visit to establish the existing conditions where the new Customer Service counter will be constructed.

3/8/16: One of the two additional doors to be upgraded to a card swipe entry has been completed and will be put in service with the switch to the new security software. We have received the plan from Grimm and Parker for the new Customer Service Counter and it is currently under review.

4/11/16: The final door to be upgraded to a card-swipe entry has been wired. JRC is working on setting up the new security cameras to be accessed from mobile devices. Some remaining hardware is required before the new security system can go "live."

b) <u>Facility Improvements - Fueling Station/Vehicle Wash Area (Account Code 1601-100)</u>: All work on the previous project for improvements to the Main Office and Maintenance Area has been completed. Our Environmental Management System (EMS) effort has identified six significant aspects to be addressed, two of which are: Contractor Delivery of Fuel and Vehicle Washing. This project will address these two aspects with the design of improvements to our Fueling Station and the design of a designated Vehicle Wash Area. The upgrade of the Fueling Station will replace the existing aging fuel tanks with state of the art underground fuel tanks and provide a catchment berm to prevent pollution of the storm water system due to a fuel spill during vehicle fueling and fuel delivery. The construction of the area dedicated to vehicle washing will allow the capture of contaminated wash water and deliver it to the sanitary sewer system and avoid pollution of the storm water system.

11/10/15: Work has begun on site with the installation of drain piping for the vehicle wash area and the fueling station area. A new storm sewer drop inlet has been installed in the lower parking lot and the new water service to the vehicle wash area has been installed.

12/8/15: The concrete pad for the new Vehicle Wash Area is scheduled to be poured the week of December 7, 2015. The new fuel tanks are being fabricated and they will be ready for delivery in about two months.

1/12/16: The concrete pad for the new Vehicle Wash Area has been poured and the drain associated with it has been installed. Work has begun on the electrical lighting system, which includes two new light poles in front of the Main Office Building and replacing light fixtures on all the existing poles with LED fixtures.

2/9/16: All of the pole lighting work has been completed with some of the building mounted lights still remaining to be installed. The existing fueling station area has been demolished and the old fuel tanks have been removed. Soil samples have been collected to test for fuel contamination to determine if any excavated soil has to be treated. The new fuel tanks have been delivered and should be set in place before the end of February 2016.

3/8/16: The soil samples have been analyzed for fuel contamination and of the seven samples collected only two showed detectable values. Both

of these samples were below the reportable limit set by the DEQ, therefore no remediation was required. The two new tanks have been set in place and filled with fuel. The footers for the new canopy have been poured and construction should begin soon.

4/11/16: Later samples from additional excavated material tested positive for fuel components and this soil was treated before disposal. All of the building-mounted lighting units have been installed. The columns that will support the fueling station canopy have been constructed and the new concrete pad for the fueling site has been poured.

c) <u>Facility Improvements – Crozet Building Renovations (Account Code 1602-100)</u>: ACSA staff identified building renovations at the Crozet property for the FY 2014 CIP Budget that were needed to maintain the value of this asset for use as a satellite maintenance facility. The roofs of both buildings must be replaced as well as the garage doors. ACSA Maintenance staff has also identified termite damage and have demolished a portion of one building's interior wall, which will need to be rebuilt. The tile floor in the same building is also in need of replacement.

4/7/15: The new ceiling has been constructed and only the insulation remains to be installed. The plumbing has been re-routed for the bathroom and framing of the interior walls continues as the floor plan is being re-designed.

5/12/15: Maintenance staff is pricing four foot fluorescent light banks for installation after the ceiling work is completed.

7/6/15: Maintenance staff has completed the framing of three areas for storage to be used by Engineering, Finance and IT. The major portion of the electrical wiring has been roughed-in and the light fixtures have been installed.

10/6/15: Doors have been provided on each of the three storage areas and new floor tile is being installed to replace the broken tile floor that was removed. All plumbing and electrical work has been completed. The existing furnace has been identified as needing replacement, though the heating area can be reduced, and therefore the furnace capacity can be less.

12/8/15: A new furnace has been installed and the floor tile work has been completed. Only minor items of work remain to complete the renovations.

d) <u>Water Storage Tank Maintenance Program (Account Code 1726-100)</u>: This project involves developing a comprehensive water storage tank maintenance and rehabilitation program for the eight tanks that the ACSA owns. The goal is to come into compliance with the recommended best practices of both the AWWA and the VDH for the maintenance of water storage tanks. Once the program is developed the ACSA will obtain prices from qualified vendors to provide the necessary services such as cleaning, inspection, coating evaluation and recommendations for repair.

11/10/15: ACSA staff met on November 6, 2015 to discuss the Draft Technical Memorandum. A site visit was made to the Northfields water tank to better understand the proposed layout for connecting a temporary pressure tank so the existing tank can be taken off-line for maintenance. Comments on the Draft Technical Memorandum were returned to Baker on November 10, 2015.

12/8/15: The Final Technical Memorandum has been received and has been approved. A draft RFP for the proposed Water Storage Tank Maintenance Contract has been prepared and is currently under review.

1/12/16: The final draft of the RFP has been completed and approved by ACSA staff. A Board authorization is proposed for this project.

2/9/16: The RFP was advertised in the paper on January 31, 2016 and full copies were distributed to some known tank maintenance contractors. The deadline for submission of proposals is March 7, 2016.

3/8/16: Two proposals were received on March 7, 2016 and they are currently under review. The review committee will meet on March 18, 2016 to discuss the ranking of the two proposals.

4/11/16: Dixon Engineering, Inc. was selected as the top-ranked proposer and ACSA staff is currently negotiating a contract with them.

e) <u>Key West Water Main Replacement (Account Code 1702-100)</u>: Several years ago the Key West Subdivision was a large well system that became contaminated with a gasoline additive. The DEQ stepped in and funded the design and construction of a public water main extension to rescue the subdivision by placing it on the ACSA water system. The existing water mains are made up of a variety of materials, some of which are not very robust, and are aging and deteriorating. There are many that are also undersized and fire protection in some areas is inadequate and without sufficient numbers of fire hydrants. Some minor improvements have been made in the Key West water system in recent years and this

project seeks to complete the upgrade of all water mains in the subdivision.

11/10/15: Approximately 58% of the water main has been installed to date, including 24 new fire hydrants. ACSA staff has received a verbal acceptance from the Key West Club of the proposed water main easement and Club Dunlora will be taking up the easement proposal at their December HOA meeting.

12/8/15: Approximately 62% of the water main has been installed to date, including 26 new fire hydrants. The Joint Permit Application for the directional drill of the new water main under the Rivanna River has been approved by the VMRC.

1/12/16: A verbal acceptance of our offer of compensation from Club Dunlora has been obtained and they are currently having their attorney review the deed of easement prior to executing it. Baker has prepared a proposal for Bid and Construction Phase Services. A Board authorization is proposed for this project.

2/9/16: Approximately 65% of the water main has been installed to date and a total of 54 water services have been switched over to the new main. Two more new fire hydrants have been added for a total of 28 installed to date. Mr. Bowling and the attorney for Club Dunlora have agreed to some minor changes to the deed of easement covering their portion of the Key West – Dunlora Water Connection. The VDOT permit associated with the connection point in Dunlora has been approved.

3/8/16: Linco has been concentrating on switching services over to the new water mains with a total of 75 customers connected to date. Water mains along Key West Drive, Explorers Road, Steubin Lane and a portion of Wildflower Drive are in service. The deed of easement has been received from Key West Club and Club Dunlora's new attorney is conducting a final review of the deed of easement across the Dunlora property.

4/11/16: Approximately 75% of the water main has been installed to date and a total of 98 water services have been switched over to the new mains. The water main along Vincennes Road has been placed in service. The final deed of easement from Club Dunlora has been received and the interconnection between Key West and Dunlora subdivisions can proceed. Bids for construction will be advertised on April 17, 2016 and bids will be opened on May 17, 2016.

f) **<u>Westmoreland Water Main Replacement (Account Code 1725-100)</u>:** This project addresses the goal in our Strategic Plan for the eventual

replacement of all asbestos-cement water mains in our system. The existing water mains are approximately 49 years old and have recently experienced multiple leaks. The Westmoreland Subdivision is between the Carrsbrook and Northfields Subdivisions that are also scheduled to have their water mains upgraded. This project will provide for a possible phasing of these two future CIP projects.

11/10/15: ACSA staff has obtained a proposal from Froehling and Robertson, Inc. (F&R) to complete 12 geotechnical borings, including rock and soil corrosiveness testing. The number of easement plats required has been received from OBG and these will be prepared as an additional cost for design services. A Board authorization is proposed for this project.

12/8/15: The geotechnical borings have been completed and the bore logs indicate no rock was encountered to a depth of six feet. We are awaiting the results of the soil corrosiveness testing.

1/12/16: The final report on the soil corrosiveness testing has been received and the soils are not a threat to the pipe integrity, therefore poly wrap will not be required for this project. The surveyor has begun work on easement plat preparation.

2/9/16: The draft easement plats have been reviewed and comments for revisions have been returned to the surveyor for final plat preparation.

3/8/16: The final approved plats have been forwarded to Mr. Bowling's office for deed preparation. A total of 26 easements will be required for this project.

4/11/16: The deeds have been prepared and offer letters have been sent to our customers. Easement acquisition is underway and 10 of 26 easements have been acquired to date.

g) <u>Michie Tavern Water Main Replacement (Account Code 1705-100)</u>: This project was added to our FY 2014 CIP to replace the water main currently serving the Michie Tavern that has been in service approximately 70 years. In recent years this water main that extends from the City system and crosses under I-64 has been experiencing an increasing number of leak repairs. A technical memorandum will be developed by our consultant to look at a couple of options for replacement before moving quickly into the design phase.

11/10/15: A total of seven bids were received on November 3, 2015 and the apparent low bidder was Vess Excavating, LTD., a contractor that has worked on a previous ACSA CIP project. A letter of recommendation for

award along with a bid tabulation has been prepared by WRA. A Board authorization is proposed for this project.

12/8/15: A Notice of Award has been sent to Vess Excavating, LTD. (Vess) and they are in the process of obtaining their bonds and assembling their product submittals so they can execute the Standard Form of Agreement.

1/12/16: All bonds and product submittals have been received and the Standard Form of Agreement has been executed by all parties. A preconstruction conference was held with Vess and the directional drill subcontractor on January 11, 2016. The Notice to Proceed date was set as January 12, 2016.

2/9/16: The pilot hole has been successfully completed by the directional drilling subcontractor and this hole will be expanded to the size necessary for the casing pipe and water main installation. The survey stakeout for the rest of the water main has been completed and we anticipate Vess will begin installation of the rest of the new water main by the end of February 2016.

3/8/16: The directional drilling subcontractor is in the process of completing the final expansion of the drill hole and anticipates the start of casing pipe installation the week of March 7, 2016. We are awaiting a revised schedule from Vess for the start of the water main installation beyond the directional drill site.

4/11/16: The directional drill under Route 20 has been completed with both the casing pipe and carrier pipe installed. The connection to the existing water main on the PVCC property has been completed and Vess is working on the restoration. We anticipate construction on the water main east of Route 20 to begin the week of April 11, 2016.

h) <u>Ivy Water Main Extension (Account Code 1727-100)</u>: The ACSA was approached by the Department of Environmental Quality (DEQ) to perform preliminary engineering and surveying of a water main extension design to serve residences and businesses in the Village of Ivy adjacent to Route 250 West that have been contaminated by leaking underground fuel tanks. In response, ACSA staff selected one of our term contract consultants to perform this work, with funding to be provided by DEQ.

11/10/15: The 50% design documents have been received and they are currently under review. It has been determined by USACE that a mussel survey is not warranted for this project.

12/8/15: Comments on the 50% design documents have been provided to WRA. The geotechnical bore locations have been selected and the consent forms have been provided to the affected property owners for execution.

1/12/16: We have received one of the three consent forms needed for the geotechnical bores and a verbal commitment from one other. ACSA staff has been in contact with the third property owner to see if we can obtain their consent as well.

2/9/16: All of the consent forms for the geotechnical bores have been obtained and the work is scheduled for the week of February 8, 2016. An alignment change was necessary to avoid negatively impacting one parcel and we have asked WRA to provide a proposal for additional surveying work for the new alignment. This proposal will have to be approved by the DEQ after ACSA staff has reviewed it.

3/8/16: The geotechnical borings have been completed and the results are under review by WRA. The additional field surveying work has been completed for the alignment change. WRA is preparing the railroad crossing permit for submission to CSX for their approval.

4/11/16: We anticipate receiving the 90% design documents during the week of April 18, 2016.

i) **<u>Berkeley Water Main Replacement (Account Code 1896-100)</u>:** In recent years the water mains in the Berkeley Subdivision have been experiencing increasing numbers of failures and leaks. The existing water mains are approximately 56 years old and consist of cast iron pipe. This project continues our systematic program to replace aging and deteriorating water mains throughout our system.

11/10/15: Comments on several draft easement plats have been returned to OBG and final plats are being prepared. As the final plats are received, ACSA staff will request deeds of easement from Mr. Bowling's office. The County has approved and issued the VSMP permit for this project.

12/8/15: A majority of the final plats have been received and they have been provided to Mr. Bowling's office for the drafting of deeds of easement.

1/12/16: The deeds of easement and plats have been distributed to all the residential customers and we have obtained 3 of the 23 easements required for construction. Final plats are being prepared for the connection from Williamsburg Road to Berkmar Drive. ACSA staff is

meeting with property owners impacted by the connection between Commonwealth Drive and Berkmar Crossing prior to final plat preparation.

2/9/16: VDOT has completed an initial review of the proposed water main replacement and OBG is making minor plan revisions based upon their comments.

3/8/16: ACSA staff has received verbal approval of proposed easements from an additional three customers and is working with a couple of other property owners to shift fire hydrant locations to preserve on-street parking, which is limited. Certified letters have been sent to seven customers who have been non-responsive to our attempts to communicate with them.

4/11/16: ACSA staff has acquired 4 of the 23 easements required for construction and has obtained verbal approval from three other property owners. The final plats and deeds for the connection from Williamsburg Road to Berkmar Drive have been completed and these have been sent to the property owners. ACSA staff continues to work with several property owners to obtain the remaining easements.

j) **<u>Glenmore Tank Study (Account Code 1709-100)</u>:** The Glenmore Subdivision is served by a single water main that extends approximately four and a half miles to the easternmost terminus of our water system. The ACSA has had a long standing policy of creating redundancy in the water system to better deal with emergency or planned disruptions of service. This project provides a water storage tank at a high point in the Glenmore Subdivision to provide at least a full day of domestic water supply in the event of a major failure of the water main that extends to this area.

8/11/15: Comments on the 90% design documents have been returned to our consultant to prepare the final design.

10/6/15: ACSA staff is evaluating what the preferred method for measuring the tank elevation should be, relative to our SCADA system and modeling requirements.

11/10/15: ACSA staff has advised Baker that we prefer a sensor inside the tank to monitor water elevation for the SCADA System.

1/12/16: The 100% design documents have been received from Baker and they are currently under review.

2/9/16: The 100% design documents have been approved. A Board authorization is proposed for this project.

3/8/16: Baker has prepared a proposal for Bid and Construction Phase Services that will also include some specialized inspection as necessary. A Board authorization is proposed for this project.

k) <u>Ivy Road – Flordon Water Connection (Account Code 1710-100)</u>: This project is one of several phased improvements identified in the West Leigh Redundancy Evaluation to provide an alternate source of water to the West Leigh Area. It is a water main extension along Route 250 West (Ivy Road) to connect the Ednam Pressure Band to the Stillhouse Pressure Band in Flordon. It is planned to be designed and constructed in conjunction with the Ednam Pump Station Upgrade to provide water to the West Leigh Area for domestic and fire protection uses in the event of a major break on the RWSA Stillhouse Mountain water transmission main.

11/10/15: Approximately 85% of the water mains have been installed, including the portion of the water main that is part of the VDOT Bridge Replacement Project. Commonwealth has had to suspend work until the completion of the bridge construction, which is expected to be November 22, 2015. They will re-mobilize when the bridge construction is completed and install the remainder of the water main, plus insert the two valves required on the RWSA Stillhouse Transmission main.

12/8/15: Commonwealth is still awaiting completion of the bridge construction so they can re-mobilize to finish the water main installation. Asphalt restoration along Route 250 West has been completed.

1/12/16: Commonwealth has re-mobilized to complete the water main installation along Old Ballard Road and Broomley Road. We anticipate the water main installation will be complete the week of January 11, 2016. Test holes have been completed at the two locations on the RWSA Stillhouse transmission main to obtain measurements for the two valve insertions that are part of this project.

2/9/16: The final portion of the water main construction has been completed. The valve insertions on the RWSA water main have yet to be scheduled because of weather-related soil conditions.

3/8/16: The new water main on the south side of the railroad has been placed in service while the water main on the north side of the railroad is undergoing bacteriological testing. The valve insertions on the RWSA water main are scheduled for the week of March 7, 2016.

4/11/16: The water main on the north side of the railroad has been placed in service, as well as the master PRV vault, and the two valve insertions on the RWSA water main have been completed. We are awaiting closeout documents from Commonwealth.

l) **<u>Ednam Pump Station Upgrade (Account Code 1710-100)</u>:** This project is one of several phased improvements identified in the West Leigh Redundancy Evaluation to provide an alternate source of water to the West Leigh Area. It is an upgrade to the existing Ednam Pump Station to increase the pumping capacity. It is planned to be designed and constructed in conjunction with the Ivy Road – Flordon Water Connection to provide water to the West Leigh Area for domestic and fire protection uses in the event of a major break on the RWSA Stillhouse Mountain water transmission main.

10/6/15: Baker has received comments from VDH on the permit application and they are addressing them.

11/10/15: ACSA staff has completed additional modeling work for Baker so they can finish addressing the comments from VDH to obtain a Certificate to Construct (CTC).

12/8/15: The CTC has been issued by the VDH for this project so we can move forward with bidding. Bids will be advertised on January 3, 2016 and bids will be opened on February 2, 2016.

2/9/16: A total of seven bids were received on February 2, 2016 and the apparent low bidder was George E. Jones & Sons, Inc., a contractor that has not previously worked on an ACSA CIP project. A letter of recommendation for award along with the bid tabulation has been prepared by Baker. A Board authorization is proposed for this project.

3/8/16: The Notice of Award was submitted to George E. Jones & Sons, Inc. (Jones & Sons) and the Standard Form of Agreement has been executed by all parties. We are waiting for the scheduling of the preconstruction conference.

4/11/16: The preconstruction conference was held on March 28, 2016 and ACSA staff is currently reviewing product submittals for the pump station work. A Notice to Proceed date will be set when the lead time for the new pumps has been determined.

m) **<u>Crozet Water Main Replacement Phase 3 (Account Code 1734-100)</u>:** This project continues our systematic program to replace the aging, undersized asbestos-cement water mains in the Crozet Water System. Our Strategic Plan calls for the eventual replacement of all asbestos-

cement water mains in our system, as they are older and made of a weaker material than the current industry norm. Multiple phases have been defined to carry out these improvements.

12/8/15: A kickoff meeting was held on December 4, 2015 with our consultant Dewberry Engineers, Inc. (Dewberry) to discuss details of the design. It is anticipated that the field surveying work will begin in January 2016.

1/12/16: The field surveying work has begun.

2/9/16: The field surveying work has been completed and development of the 50% design documents is underway.

4/11/16: The 50% design documents have been received and they are currently under review.

n) <u>Orchard Acres Water Main Extension (Account Code 1890-100)</u>: This project continues our systematic program to replace the aging and undersized cast iron and asbestos-cement water mains in the Crozet Water System. It also addresses the goal in our Strategic Plan for the eventual replacement of all asbestos-cement water mains in our system. These water mains have been in service for approximately 59 years and have reached the end of their useful life.

7/6/15: The geotechnical boring work has been completed and rock was encountered at only one of the twelve locations tested.

9/8/15: The 90% design documents have been received and they are currently under review.

11/10/15: Comments on the 90% design documents have been returned to WRA.

12/8/15: The 100% design documents have been received and they are currently under review. WRA has determined the number of easement plats required for this project, which will be prepared as an additional design expense. A Board authorization is proposed for this project.

2/9/16: Comments on the 100% design documents have been returned to WRA.

3/8/16: Draft easement plats are currently being prepared by WRA.

o) <u>Greenbrier Drive Sewer Replacement (Account Code 1816-100)</u>: While reviewing the design of the City's Hillsdale Drive Extension Project

for conflicts with our utility system, the ACSA staff identified an opportunity to potentially construct the Greenbrier Drive Sewer Replacement Project. This project was originally scheduled for FY 2018 in the CIP Rate Model. By incorporating this sewer main replacement into the road extension project, which will disturb several existing roadways, ACSA staff believes significant cost savings can be realized over completing the work three years from now. The project will replace and up-size approximately 700 feet of sanitary sewer main

8/11/15: ACSA staff developed a Scope of Services with the City's consultant, McCormick Taylor, Inc., for survey and design work to replace the existing sewer main as part of the road extension project. The draft agreement is currently under review by the City's attorney as the consultant proceeds with design of the sewer main.

9/8/15: The City attorney has reviewed and approved the draft agreement for the design work to be performed on behalf of the ACSA. Since the agreement references the plans, it will be executed when the design is complete.

10/6/15: The preliminary design for the sewer relocation plan has been received, reviewed and comments have been returned to the consultant, McCormick Taylor.

3/8/16: The 90% design documents were received and reviewed with comments being provided to McCormick Taylor. We anticipate the project will be bid at the end of March 2016.

4/11/16: The 100% design documents were received, reviewed and comments were returned to McCormick Taylor. This project was advertised for construction on March 31, 2016 and the bid opening is scheduled for May 16, 2016.

p) **<u>Oak Hill Sewer Phase 2 (Account Code 1803-100)</u>:** This project will provide sanitary sewer service to the remaining 20 property owners within the Oak Hill Subdivision that were not previously served by the Phase 1 project. Many of the septic systems in this subdivision continue to fail due to age and poor soil drainage conditions. It is believed a majority of the remaining residents not on public sewer can be classified as Low to Moderate Income (LMI) households. Therefore the ACSA is planning to pursue a Community Development Block Grant (CDBG) from the Virginia Department of Housing & Community Development (VDHCD) for partial funding for construction, in cooperation with the County of Albemarle.

11/10/15: The County has officially received the Construction-Ready funding grant for this project and our customers have been notified. Mr.

Ron White of the County's Housing Division has prepared a draft Memorandum of Agreement (MOA) between the County and ACSA, which has been reviewed by Mr. Bowling. ACSA staff will bring the MOA before the Board at their December meeting for approval and execution.

12/8/15: The VDHCD has requested that the ACSA and County not execute our MOA until they have entered into an agreement with the County for the disbursement of the grant funds. ACSA staff will bring the MOA before the Board for approval as soon as we are able.

1/12/16: A negotiation meeting was held on January 12, 2016 between VDHCD and the County to finalize their agreement for the grant disbursement. The MOA between the ACSA and County has been reviewed by Mr. Bowling and is ready for execution once the County and VDHCD have executed their agreement. A Board authorization is proposed for this project.

2/9/16: The VDHCD has required that ACSA obtain signed User Agreements that state the expected user fees, by March 12, 2016, from all 20 customers that will be connected to the new sewer system. This is also their deadline for executing the grant agreement with the County. To date ACSA staff has obtained 18 of 20 User Agreements. The project was advertised for bids on January 31, 2016 and the bid opening is scheduled for March 2, 2016.

3/8/16: The final two User Agreements have been obtained. A total of two bids were received on March 2, 2016 and the apparent low bidder was Commonwealth Excavating, Inc., a contractor that has previously worked on several ACSA CIP projects. A letter of recommendation for award and the bid tabulation has been prepared by OBG. A Board authorization is proposed for this project.

4/11/16: The Notice of Award was sent to Commonwealth and the Standard Form of Agreement has been executed by all parties. A preconstruction conference has been scheduled for April 12, 2016. Notices of the impending construction have been mailed to our customers.

q) <u>Ednam Drainage Basin SSES (Account Code 1804-100)</u>: This project is one of the priority drainage basins scheduled for I&I reduction in our DEQ Consent Order. The study area includes Ednam Village, portions of Ednam Forest, the commercial area on the north side of Route 250 West from the Ednam Forest entrance to the Volvo Dealership, as well as, the private sewer system in the Farmington Subdivision. The deadline for completion of the SSES is July 1, 2014. The SSES will consist of manhole inspections, sewer flow monitoring, smoke testing, night flow

isolation and measurement, flooded dye testing and CCTV of sewer mains.

2/10/15: The Board of Directors of Farmington, Inc. approved including the cost of rehabilitation of their private sanitary sewer system in their 2015 budget. They are currently getting estimates for completing the work described in the Ednam Drainage Basin SSES Report. ACSA staff has updated our previous cost estimate for the same work based upon the unit pricing of the City's new Miscellaneous Sewer Rehabilitation contract, which we are able to piggyback. Once Farmington has completed their own estimate we will meet with their Facilities Manager to discuss how to proceed and develop a schedule that will be provided to DEQ for their approval.

4/7/15: A meeting with the Farmington Facilities Manager has been scheduled for April 8, 2015 to discuss the logistics and scheduling of the rehabilitation of their private wastewater collection system.

5/12/15: A meeting was held with Farmington representatives on April 8, 2015 to discuss the cost and scheduling of the rehabilitation work required in their private wastewater collection system. They are required to obtain three prices for the work and they will use our piggyback contract pricing as one of the quotes. It is possible they could complete some of the work in conjunction with improvements near the clubhouse using their own contractor.

10/6/15: Farmington has decided to use their own contractor, who is making improvements in the vicinity of the inn, to complete the rehabilitation work described in the final SSES report. We are awaiting confirmation of their schedule so we can inspect the work.

3/8/16: Farmington has obtained all the necessary quotes for completing the rehabilitation work on their privately owned sewer system. They expect to begin work within the next two weeks using three different contractors for the various components of specialized work.

4/11/16: All of the pipe relining and pipe bursting have been completed by Farmington's contractor. Only the manhole rehabilitation work remains to be completed.

r) <u>Camelot Drainage Basin SSES (Account Code 1813-100)</u>: ACSA staff has identified other large drainage basins to be evaluated for infiltration and inflow (I&I) to continue our efforts to maintain the integrity of our wastewater collection system. This study area includes the oldest portions of the Camelot and Briarwood Subdivisions, as well as, the offsite portion of the sewer main that serves the Rivanna Station facilities where

the National Ground Intelligence Center and Joint Use Intelligence Analysis Facility are located. The sanitary sewer evaluation survey (SSES) will consist of manhole inspections, sewer flow monitoring, smoke testing, night flow isolation and measurement, flooded dye testing and CCTV of sewer mains.

9/8/15: The last manhole has been inspected and smoke testing has been completed. ACSA staff is awaiting OBG's recommendation for CCTV work.

10/6/15: The CCTV recommendations have been made by OBG and ACSA staff is awaiting the schedule of work from their sub-consultant.

11/10/15: The CCTV work is being performed by ACSA staff in order to save money, with 3 of 5 segments being televised to date. When completed, the footage will be provided to OBG for analysis.

12/8/15: The ACSA Maintenance crew has completed the CCTV work in the Camelot Subdivision and the video footage has been provided to OBG for analysis.

2/9/16: We have received a revised schedule from OBG that the draft SSES Report will be submitted by the end of February 2016.

3/8/16: The draft SSES Report has been received from OBG and it is currently under review.

s) <u>FY 2015 Miscellaneous Sanitary Sewer Rehabilitation (Account Code 1806-100)</u>: This project continues our "find and fix" program of sanitary sewer rehabilitation to reduce I&I in our system during the current fiscal year. The piggyback of the City contract has been renewed through December 2014 when it expires. The City plans to advertise another miscellaneous sewer rehabilitation contract in the next couple of months that we will also be able to piggyback. It will be utilized to make repairs and rehabilitate problems in our system found with systematic CCTV inspection by ACSA crews and the subcontractor. It will also be used to complete rehabilitation recommendations generated from the SSES's of larger drainage basins.

11/10/15: Both Work Order No. 1 (Linco) and Work Order No. 3 (Linco) under the previous contract have been completed. ACSA Maintenance staff is determining if the final manhole rehab under Work Order No. 4 (Linco) is necessary. The relining of sewer mains under Work Order No. 3 (Commonwealth) has been completed leaving the rehabilitation of 3 manholes to finish this work order. Work Order No. 4 (Commonwealth)

has been issued for CCTV work in Canterbury Hills, a point repair on North Bennington Road and the rehabilitation of 4 manholes.

12/8/15: The final manhole rehab under Work Order No. 4 (Linco) will be transferred to the new rehabilitation contract with Commonwealth so that Linco can proceed with providing closeout documents for their contract. The CCTV work in Canterbury Hills under Work Order No. 4 (Commonwealth) has begun.

1/12/16: The closeout documents have been received from Linco and they are currently under review. The CCTV footage from Canterbury Hills obtained under Work Order No. 4 (Commonwealth) is being analyzed.

2/9/16: Work Order No. 5 has been issued for CCTV work and point repairs in Ednam, as well as, point repairs in Forest Lakes and manhole rehabilitation at various locations. Work Order No. 6 was issued for CCTV inspection and point repairs in Woodbrook in addition to point repairs at various other locations. Work Order No. 7 was issued for a point repair on Rustic Willow Lane, which has been completed, with only some pavement restoration remaining. ACSA staff has also identified an exposed sewer main behind 1339 Mosby Reach and is working with Commonwealth to devise a solution.

3/8/16: Work Order No. 1 has been completed. Work Order No. 8 was issued for the relining of approximately 6,600 linear feet of sewer mains in the Canterbury Hills Subdivision. Work Order No. 9 was issued for the re-stabilization of the slope to cover and protect the exposed sewer main behind 1339 Mosby Reach. This work has progressed very quickly and only some final restoration remains to be completed.

4/11/16: The relining work in Canterbury Hills under Work Order No. 8 has begun. Work Order No. 9 has been completed. The contract with Commonwealth is due for renewal during the month of April 2016 and they are checking to see if there are any increases in unit pricing, which are allowed, with certain restrictions, on this multiple year contract.

t) **<u>PVCC Drainage Basin Rehabilitation (Account Code 1808-100)</u>:** This project is the final priority drainage basin scheduled for I&I reduction in our DEQ Consent Order. The study area is south of Moore's Creek and lies between Route 20 South on the east and Avon Street Extended on the west. The southernmost boundary incorporates the Avinity Subdivision and the Kappa Sigma Fraternity Headquarters. The old Blue Ridge Sanitarium site is also included, which lies just east of Route 20 South and just south if I-64. The sanitary sewer evaluation survey (SSES) will consist of manhole inspections, sewer flow monitoring, smoke testing,

night flow isolation and measurement, flooded dye testing and CCTV of sewer mains. The deadline for completion of the SSES is July 1, 2015.

8/11/15: The work schedule has been received from Commonwealth and they plan to start in September 2015. The plan for rehabilitation and schedule has been sent to DEQ for their review and approval.

9/8/15: The DEQ has approved the plan and schedule for the PVCC Drainage Basin rehabilitation work with a deadline of April 30, 2016.

10/6/15: The Tandem School has agreed to hire a plumber to help them identify all illegal storm water connections to their sanitary sewer laterals.

11/10/15: Tri-State Utilities has completed the relining of two sewer main segments and Commonwealth is scheduled to begin manhole rehabilitation in November.

2/9/16: Commonwealth has revised their schedule for manhole rehabilitation to begin this month. Adjustments to some manhole frame and covers are required in order to schedule their subcontractor for internal manhole rehabilitation.

***4/11/16:* The pipe replacement work along Route 20 has been completed and most of the manhole rehabilitation has been finished. The relining of five sewer main segments remains to be completed and we expect to receive a schedule for this work in the next few days.**

u) <u>Peter Jefferson Place Pump Station Improvements (Account Code 1815-100)</u>: This pump station constructed 17 years ago was designed to serve a large drainage basin with the potential for dense development. To date the potential development within the drainage basin has been slow and as a result the pumps are over-sized for the amount of flow received at the station. Due to the lower flows the pumps are not operating efficiently and this is increasing the wear and tear on the equipment. A study to evaluate options to improve the efficiency of the pumps without replacing them will be undertaken to determine the best approach, followed by the design and implementation of changes to the pumping equipment.

2/9/16: A kickoff meeting was held on January 27, 2016 with Baker to discuss the details of the project.

3/8/16: ACSA staff has met with the Director of Facilities for Martha Jefferson Hospital and determined their long-term plans for expansion will not impact the pump station. ACSA staff will also meet with a

representative from Peter Jefferson Place to determine if they have any plans for future expansion.

4/11/16: SCADA data, water usage records and the future expansion plans of MJH have been provided to Baker.

v) **<u>Airport Sewer Collector Upgrade Evaluation (Account Code 1814-100)</u>: The original sewer collector serving the airport and the area west of Route 29, which now includes the Hollymead Town Center and Willow Glen, was originally sized to serve the light industrial zoning designated for that area at the time of construction. As a result, the increased density specified in the County Comprehensive Plan for the same drainage basin, at build-out, will exceed the capacity of the existing sewer main. This project will review the current zoning, the County's Places 29 Master Plan and the existing conditions of the sewer system to develop a plan for upgrading the capacity of the Airport Sewer Collector.**

4/11/16: ACSA staff has provided Baker with sewer meter flow data from our fixed location meters on this sewer main to assist them with their study, as well as, water consumption records. Notification letters are being prepared for customers near this sewer collector in advance of the field surveying work, which is scheduled for the week of April 25, 2016.

w) **<u>North Fork Regional Pump Station (Account Code 1809-100)</u>:** As part of the RWSA Comprehensive Sewer Interceptor Study their consultant analyzed three options for the replacement of the poorly performing and deteriorating Camelot WWTP. The options included an upgrade of the existing Camelot WWTP, a nine mile extension of a gravity sewer interceptor and a regional pump station. The best option was determined to be the regional pump station and the ACSA committed to initiating this project with the deadline of April 2013 when the Camelot WWTP permit was set to expire if major treatment upgrades were not completed. Due to the expense (approximately $10 million) of this largest CIP project ever undertaken by the ACSA, a bond issue was pursued while design was started. To help repay the bond issue a special rate district was established for all properties that could be served by the regional pump station project, which would be in addition to the normal sewer connection fees.

9/8/15: The record drawings for the Camelot Pump Station have been reviewed and approved, completing the approval of all record drawings for this project. The final easement that was acquired by condemnation has been settled without having to proceed with a hearing. The attorney for the Contract Purchaser of the Camelot WWTP parcel has been instructed

to contact Mr. Bowling directly with comments on the deed of conveyance. Monthly reports are being obtained from the odor control provider along with data on hydrogen sulfide levels and the required dosage of bioxide.

10/6/15: The closing on the sale of the former Camelot WWTP parcel has been set for October 15, 2015.

11/10/15: The closing of the sale of the former Camelot WWTP parcel was completed on October 27, 2015 and the funds have been received. ACSA staff is scheduled to meet November 17, 2015 to begin an audit of all the expenses associated with the NFRPS Project.

12/8/15: ACSA staff met on November 17, 2015 to review all the expenses for the NFRPS Project. A final review of the General Ledger is underway to verify all costs for confirmation of the Special Rate District Fee calculations.

3/8/16: ACSA staff has completed a review of the project expenses and determined that the cost of the North Zone components of the project increased over the estimated amount used to calculate the Special Rate District Fee for this zone. The amount calculated for the South Zone did not change appreciably. ACSA staff plans to prepare an Agenda item for the April Board Meeting for discussion.

4/11/16: ACSA staff has prepared a summary memo for the final project expenses. This project will be discussed as an Agenda item.

x) <u>West Leigh Water Main Replacement (Account Code 1878-100)</u>: The West Leigh Subdivision was originally a private well system that was eventually connected to public water. The existing water mains are approximately 41 years old and consist of asbestos-cement pipe. Since the subdivision began as a private well system many of the water mains are also undersized. This addresses the goal of our Strategic Plan to eventually eliminate all asbestos-cement mains from our utility system. Some of the water mains in West Leigh have already been replaced and this project will replace the remaining water mains along six roads over the next three fiscal years.

11/10/15: The final water services on Cornwall Road have been switched over to the new water main and the old water main has been abandoned. The trees at the end of Wendover Drive have been successfully removed and the paving along Devonshire Road and Wendover Drive has been completed. Construction of the new water main along Croydon Road is just getting underway.

12/8/15: Construction of the new water main along Croydon Road continues with approximately 55% of the pipe being installed. A final punch list of items to correct on Cornwall Road has been given to the Maintenance Department.

1/12/16: All of the new water main along Croydon Road has been constructed and has been placed in service. Water service connections are being switched over to the new water main. The ACSA Maintenance Department is working on the punch list items for Cornwall Road.

2/9/16: The punch list items on Cornwall Road have been completed and only one water service remains to be switched over to the new main on Croydon Road. It is anticipated that the final water main construction along Sheffield Road will begin by the end of February 2016.

3/8/16: The final water service on Croydon Road has been switched over to the new water main. The materials for the Sheffield Road water main replacement have been ordered and notices have been sent to our customers advising them of the upcoming installation along their road.

4/11/16: The old water main along Croydon Road has been abandoned and only minor restoration work remains. The water main is being constructed along Sheffield Road with approximately 10% having been installed to date.

y) <u>Autumn Hill Water Meter Relocation (Account Code 1717-100)</u>: This project involves the upgrade and relocation of several master meters within this apartment complex to improve access for maintenance. One meter will be down-sized to give us greater accuracy at low flows and the relocation of another meter will allow us to abandon a water main that is being encroached upon by trees and a concrete sidewalk.

11/12/13: The easement documents have been sent directly to the senior property manager at the corporate office and they are currently under review.

2/12/14: Our contact in the corporate office has informed us that he has been unable to get the lenders and investors to sign off on the proposed easements. He believes the ACSA should offer to purchase the easements and pay their legal fees for review of the easements. The upgrades to the meters are to the benefit of the customer by making future maintenance and repair less disruptive, plus eliminate the possibly of having to damage trees to fix the water main being encroached upon. ACSA staff will prepare a letter giving a detailed argument for the above mentioned benefits of the project and respectfully declining to offer

compensation. This is a project that we would like to complete but it can be postponed.

3/13/14: ACSA staff is working on the initial draft of the letter detailing the need for this project and explaining the benefit to the customer. The final draft will be presented to Mr. Bowling for his review prior to mailing.

4/10/14: The final draft of the letter is complete and it has been mailed to the property owner.

5/8/14: The property management company is reviewing our letter with the property owner, their attorney and their lenders. We are awaiting their response concerning whether or not they will execute the deed of easement.

6/4/14: The property management company has stated the easement documents will be executed provided the ACSA states in a letter that when the new meters are installed that we will not attempt to back bill them if the new meters show greater usage. As it has never been the policy of the ACSA to back bill customers when meters have been replaced, the letter has been drafted and mailed to all parties involved.

z) <u>Madison Park Pump Station Upgrade (Account Code 1735-100)</u>: This wastewater pump station was constructed 33 years ago by private development and the original equipment is wearing down. In addition the building is undersized creating difficulty in performing routine maintenance and making it impossible to install the control panels necessary to include this pump station in our new SCADA System. A study to evaluate the best option for upgrading this pump station will be performed, followed by design and construction.

4/11/16: A kickoff meeting was held with WRA and ACSA staff to discuss the details of the project.

aa) <u>East Market Street Water Main Replacement (Account Code 1728-100)</u>: This project is one of five small in-house CIP projects that comply with our long-term goal of replacing all 2" diameter water mains with larger diameter pipe made of stronger material. It involves the replacement of a 2" diameter galvanized water main that serves the last three duplexes at the end of East Market Street and it will allow the transfer of a water service from a City main to an ACSA main. Funds originally were appropriated for all five projects in June 2007 and three have been completed to date. Although funding has been in place, work on this project was delayed due to other in-house CIP projects being assigned a higher priority.

11/10/15: ACSA staff has approved the relocation of the fire hydrant and has obtained a proposal for additional surveying services that is currently under review.

12/8/15: ACSA staff has authorized the additional surveying services that are required to finalize the easement plats and complete the design work. The field surveying is anticipated to be completed before the end of December 2015.

1/12/16: Revised draft easement plats have been received from Roudabush, reviewed, and comments have been returned to them for the preparation of final plats.

2/9/16: The final plats have been reviewed and comments have been returned to Roudabush to make some minor edits.

3/8/16: The final plats have been approved and the deeds of easement have been prepared. Easement acquisition will begin soon. Final edits have been made to the construction drawings.

4/11/16: Offer letters for the required easements have been mailed to the affected property owners to begin the easement acquisition process.

bb) <u>Ridgewood PRV/Meter Upgrade (Account Code 1721-100)</u>: Currently the pressure reducing valve (PRV) and meter are located in manhole structures with limited space, making maintenance difficult. Both the PRV and meter vaults need to be upgraded to meet current ACSA specifications.

9/11/13: ACSA staff has discussed the project with the property owner and is gathering information to address the questions he asked about construction of the project.

5/8/14: ACSA staff is attempting to re-establish contact with the customer to see if we can move this project forward.

9/10/14: The original easement plat has been revised to allow more room to relocate the water meter and install a larger PRV vault. A revised deed of easement is being prepared and it will be sent to the customer by certified mail for execution.

11/11/14: This project is on hold again while we wait to determine the impact of the VDOT Route 29 Solutions Project after the design-build firm is selected. The impact could be substantial and actually this project may be completed as part of the VDOT project.

7/6/15: The Route 29 Widening utility relocation plans that could impact the status of this CIP project are currently under review. When the design plans are finalized ACSA staff will determine if this project will be necessary.

2/9/16: This project will be completed as part of the Route 29 Widening portion of the Route 29 Solutions road improvements, with ACSA paying the cost since it is considered betterment. The work will no longer be performed by Maintenance staff. We anticipate receiving an estimate of the construction cost by the end of February 2016.

cc) <u>Automatic Flushing Assemblies (Account Code 1729-100)</u>: The RWSA Stage 2 Disinfectants and Disinfection Byproducts Rule Compliance Plan identified five areas in the ACSA water distribution system where disinfection byproducts could not be addressed by creating a secondary feed. The study recommended the use of automatic flushing assemblies to reduce water age in these areas and thereby reduce disinfection byproducts. Since that study ACSA staff has identified other areas where water age may need to be reduced either long-term or temporarily. This project will include the purchase of the assemblies with the installation to be performed by ACSA forces.

10/6/15: ACSA staff is evaluating the seasonal usage at Monticello to make further adjustments to the fixed automatic flushing assembly at the RWSA location.

11/10/15: The flushing duration has been increased at the RWSA location and the chlorine residual readings have risen to an acceptable level. Adjustments continue to be made at the Thurston Drive fixed flushing assembly location. The portable flushing assemblies at Meriwether/Lewis Elementary School, Camp Holiday Trails, and the PVCC Stultz Building are scheduled to be removed within the next two weeks to avoid damage from freezing. ACSA Engineering and Maintenance staff will evaluate the condition of the existing 2" diameter water main in the Yancey Mills area to determine if it should be replaced prior to the installation of the fixed flushing assembly. This water main is also being evaluated for the installation of a blow-off assembly.

12/8/15: All portable flushing assemblies have been removed to avoid damage from freezing temperatures. The two fixed automatic flushing assemblies located at RWSA and Thurston Drive continue to be monitored. They will be adjusted as demand in the system dictates.

2/9/16: The Maintenance Department has completed a test hole in the Yancey Mills area on Hillsboro Lane to verify the location of the 2"

diameter galvanized water main. This water main will be replaced by ACSA personnel in preparation for installing a fixed automatic flushing assembly at this location.

3/8/16: Engineering and Maintenance staffs are working on the design for the water main replacement at the end of Hillsboro Lane.

4/11/16: The portable flushing assembly was re-deployed at Camp Holiday Trails on March 28, 2016. In-house design is underway to place a fixed automatic flushing assembly in the North Pines Subdivision.

dd) <u>Camp Holiday Trails Chlorine Residual Evaluation (Account Code 1724-100)</u>: This project develops a sampling program of a variety of water parameters to verify water quality, specifically chlorine residual levels, at the point of delivery to Camp Holiday Trails (CHT), due to seasonal variations in water demand. If it is determined that CHT has a low chlorine residual a technical memorandum will be prepared outlining alternatives for adjusting the water quality at different locations with a benefit/cost analysis for each alternative. A recommendation for the preferred alternative will be provided along with a planning level summary of equipment and materials needed for implementation.

9/8/15: Comments from ACSA staff are being compiled for our term contract consultant, Baker, to enable the completion of the Technical Memorandum.

10/6/15: Comments on the Draft Technical Memorandum have been provided to Baker.

11/10/15: The Final Technical Memorandum has been received and ACSA staff is moving toward implementing the recommendation to add chlorine to the service line at the pH treatment building. Baker is preparing a schematic for the additional equipment required, which will be used by ACSA personnel to guide them during installation.

1/12/16: The schematic for the chlorine booster equipment to be added at the pH treatment building has been received and is currently under review.

3/8/16: Comments on the schematic drawing for the chlorine booster equipment were provided to Baker and the final edits have been completed. Engineering and Maintenance are coordinating the procurement of pricing for the various components, which will be installed by ACSA personnel.

4/11/16: ACSA staff has procured prices for all the necessary equipment components and an estimate of the labor to install them. A Board authorization is proposed for this project.

ee) <u>SCADA System (Account Code 1605-100)</u>: The ACSA Utility System has over 40 critical assets that include water and wastewater pump stations, water storage tanks and master PRV stations. They are considered critical because malfunctions or failures at any of the assets could have a drastic effect on our utility system and our customers. These assets are currently monitored by site visits of assigned Maintenance personnel. This project will create a Supervisory Control and Data Acquisition (SCADA) System that will allow ACSA employees to remotely monitor the operations of these critical assets from the main office building. It will also allow personnel to change the operational settings of some pump stations from the main office building. Using alarms we will be able to more quickly evaluate problems and prevent some failures before they happen. The project will be completed in three phases over a three year period.

10/6/15: A draft RFP for the competitive negotiation contract option has been received from WRA and it is currently under review.

11/10/15: Comments on the draft RFP for the competitive negotiation contract have been provided to WRA for completion of the document. The ACSA Prequalification Process that was added to the former ACSA Purchasing Manual will be added to the recently adopted new Purchasing Manual.

12/8/15: WRA has finalized the RFP and pre-qualification package for proceeding with the competitive negotiation for the construction of Phase 2. A Board authorization is proposed for this project.

1/12/16: A draft advertisement for the RFP has been received and is currently under review. The target date for advertising the RFP for Phase 2 is January 17, 2016.

2/9/16: Comments have been returned to WRA on the draft RFP and the 100% design documents. Necessary changes to the Contract Documents related to Competitive Negotiation have pushed back the schedule for advertising the RFP for Phase 2. WRA has prepared a proposal for the design of Phase 3 of the SCADA System. A Board authorization is proposed for this project.

4/11/16: The RFP for Phase 2 of the SCADA project has been finalized and it was advertised on April 10, 2016. The due date for submission of proposals is May 13, 2016. A kickoff meeting for the

design of Phase 3 of the SCADA project was held on April 6, 2016 with WRA.

ff) **<u>Ashcroft Pump Stations #2 and #3 Capacity Improvement (Account Code 1879-100)</u>:** In order to meet current domestic demand, fire flow requirements and future development in Ashcroft, the pumps in stations #2 and #3 will need to be upgraded. This project will evaluate all the alternatives for increasing the pumping capacity within the limits of space and available electrical service.

10/6/15: ACSA staff has received a proposal for the design of the upgrades to Ashcroft Pump Stations #2 and #3 from our consultant, WRA and it is currently under review.

11/10/15: The design services proposal for the upgrade of the Ashcroft Pump Stations #2 and #3 has been finalized by WRA. A Board authorization is proposed for this project.

1/12/16: A kickoff meeting was held on December 15, 2015 with WRA to discuss details of the design services.

2/9/16: The ACSA Modeling Engineer is assisting WRA with pump selection by modeling the operation of potential future pumps.

3/8/16: The results of our modeling showed the pumps selected for the upgrade are slightly oversized but their flow rate can be adjusted without having to choose different pumps. The design of standby generators at each pump station has been added to this project.

4/11/16: Some pump options are still being explored for Pump Station #2 that will affect the pump selection for Pump Station #3. WRA has determined that neither pump station building will have to be expanded to accommodate the new equipment.

gg) **<u>Route 29 Solutions (VDOT Project)</u>:** This project is not currently an ACSA CIP project; however, we wanted to keep the Board informed of the status as it moves forward. This is a fast track design-build venture for VDOT with three firms preparing design/cost proposals for award of the project. It consists of three parts: 1) Rio Road/Route 29 Grade Change Intersection, 2) Route 29 Widening, and 3) Berkmar Drive Extended. All three projects will have major impacts on both ACSA and RWSA utilities. If any utility work is specified by the ACSA as “betterment” (i.e. – an upgrade to the existing utilities) then an ACSA CIP project could be created.

9/8/15: The 100% design documents for the Route 29 Widening portion of this project and the 100% design documents for the Berkmar Drive Extended portion of this project have been received and they are under review.

10/6/15: Comments on both the 100% design documents for the Route 29 Widening portion of this project, and the 100% design documents for the Berkmar Drive Extended portion of this project have been returned to the consultant.

11/10/15: The connection of the new RWSA water transmission main around the Rio Road intersection is scheduled for the week of November 16, 2015. ACSA staff is assisting with the closing of our valves to facilitate the work to place the new water main in service.

12/8/15: The connection of the new RWSA water transmission main at three locations around the Rio Road intersection was postponed to allow for adequate flushing and the bacteriological testing to be completed. The connection work is scheduled to begin the week of December 7, 2015.

1/12/16: The new RWSA water transmission main in the vicinity of the Rio Road intersection has been completed and has been placed in service. The ACSA connection to the RWSA water main at Albemarle Square remains to be completed, as well as, abandonment of ACSA water main connections to the old RWSA water main south of the Rio Road intersection. We anticipate receiving the final design documents for both the Route 29 Widening and the Berkmar Drive Extended portions of the project by the end of January 2016.

2/9/16: The ACSA water main connection to the relocated RWSA water main in front of Albemarle Square has been completed. The abandonment of the ACSA water main connected to the old RWSA water main south of the Rio Road intersection is scheduled for the week of February 8, 2016. The cost estimate for betterment items on the Route 29 Widening and Berkmar Drive Extended portions of this project are anticipated by the end of February 2016.

4/11/16: The final design documents for the Route 29 Widening and Berkmar Drive Extended portions of the project have been received electronically and reviewed with no further comments. We are awaiting receipt of paper copies of these plans before executing the written agreement for the design and construction of these phases. ACSA staff has approved product submittals for the Route 29 Widening. The cost estimate for the betterment items in the Berkmar Drive Extended portion of the project has been received and comments have been returned to the contractor. The betterment

consists of oversizing of a casing pipe and a relocated sewer main to accommodate future growth.

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Albemarle County Service Authority (ACSA)
Active Private Development Projects
April 2016

a. 2335 Seminole Lane (Rio): Water relocation and fire hydrant installation in front of 2335 Seminole Lane. This project is located across from the DoubleTree Hotel, just south of the Rivanna River.

b. 5th Street Station – Wegmans/Bent Creek Parkway (Scottsville): Water and sewer main extension to serve new commercial development. This project is located between Avon St. Ext. and 5th St., just north of I-64.

c. 5th Street Station – Phase 2 (Scottsville): Water and sewer main extension to serve the remainder of the 5th Street Station commercial development. This project is located between Avon St. Ext. and 5th St., just north of I-64.

d. Albemarle Health and Rehabilitation Center (Scottsville): Water and sewer main extension to serve a 120 unit nursing care facility. The project is located off Mill Creek Drive, adjacent to the Monticello Fire Station.

e. Ashcroft Phase 2 Sections 6 & 7 (Rivanna): Water main extension to serve 14 residences. The project is located at the upper end of Summit Ridge Trail.

f. Avinity 1, Phase 4 (Scottsville): Water and sewer main extension to serve 7 residences. The project is located off Avon St. Ext. at the intersection with Avinity Drive.

g. Belvedere Phase 2 (Rio): Water and sewer main extensions to serve 51 residences. This project is located between the Belvedere and Dunlora Subdivisions.

h. Briarwood Phases 1A-1,1B-1,4 & 8 (Rio): Water and sewer main extensions to serve 165 residential units. The project is located in between the existing Briarwood and Camelot subdivisions, across from the entrance to the National Ground Intelligence Center.

i. Cascadia, Blocks 1-3 (Rivanna): Water and sewer main extensions to serve 119 residential units and 5,000 sq. ft. of commercial space. The project is located in between the existing Hyland Ridge and Fontana subdivisions, across from the entrance to Darden Towe Park.

j. Cascadia, Blocks 4-7 (Rivanna): Water and sewer main extensions to serve 146 residential units. The project is located in between the existing Hyland Ridge and Fontana subdivisions, across from the entrance to Darden Towe Park.

k. Crozet Avenue North Sidewalk Improvement Project (White Hall): Water main replacement along Crozet Avenue to facilitate a new sidewalk and drainage infrastructure.

l. Estes Park (Rivanna): Water and sewer main extensions to serve 68 single family units 200 yards south of the intersection of Worth Crossing and Profit Road.

m. Foothill Crossing Phases 4 & 5 (White Hall): Water and sewer main extensions to serve 33 single family units at the end of Park Ridge Drive.

n. Glenmore Section K2C (Scottsville): Water and sewer main extensions to serve 26 single-family units near the intersection of Carroll Creek Road and Farringdon Road.

o. Hillbrook (Rio): Water and sewer main extensions to serve 6 single-family units near the intersection of Old Brook Road and Raintree Drive.

p. Hollymead Town Center Area C, Block 4 (Rio): Water and sewer main extensions to serve 29 single family attached units at the intersection of Timberwood Boulevard and Laurel Park Lane.

q. Hyland Ridge Off-site Water (Rivanna): Off-site water connection to existing water main at Tremont Rd., to serve 13 lots on Hyland Ridge Dr.

r. Old Trail Creekside III, Phase III (White Hall): Water and sewer main extensions to serve 24 single-family units west of Welbourne and Windmere Lanes.

s. Old Trail Village Block 12 (White Hall): Water and sewer main extensions to serve 19 single-family units at the intersection of Old Trail Drive and Glen Valley Drive.

t. Old Trail Village Block 15 (White Hall): Water and sewer main extensions to serve 18 single-family units at the intersection of Glen Valley Drive and Claremont Lane.

u. Old Trail Village Block 27 (White Hall): Water and sewer main extensions to serve 25 single-family units east of Belgrove Street.

v. Piedmont Place (White Hall): Water and sewer main extensions to serve 6 residential units, 5,400 sq. ft. of commercial/retail space, 2,000 sq. ft. of office space and a 75 seat restaurant, in downtown Crozet.

w. Stonefield Block D2 (Jack Jouett): Water and sewer main extensions to serve a 107 unit townhome block within the Stonefield development. This site is located northwest of the intersection of Hydraulic Road and Inglewood Drive.

x. Stonefield Blocks F & G (Jack Jouett): Water and sewer main extensions to serve Costco and 4 future commercial buildings within the Stonefield development. This site is located west of the intersection of Route 29 South and District Avenue.

y. Whittington Subdivision Phase B (Samuel Miller): Water and sewer main extensions to serve 96 single-family units south of the Mosby Mountain Subdivision on Old Lynchburg Road.

PCG/pcg
0506 Active Private Development Projects 040716

Capital Improvement Program		Percent		2016	2017	2015	2015	2015	2015	2015	2015	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2017	2017	2017	2017	2017	2017
Proposed Project Schedule Worksheet: April 2016	**Acct. #**	Growth	PM	Forecast	Forecast	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Facility Improvements - Security Upgrades/Warehouse	1613-100	0%	AM	285,000																									
Facility Improvements - Fueling Station/Vehicle Wash	1601-100	0%	MV																										
ACSA Facilities Paving					121,000																								
ACSA Facilities - Operations Center Expansion Study	1612-100	100%	AM	50,000																									
Water Storage Tank Maintenance Program	1726-100	0%	JL	17,962																									
Key West Water Main Replacement	1702-100	0%	MV	600,000																									
Westmoreland Water Main Replacement	1725-100	0%	JL		791,900																								
Camelot Water Main Replacement					218,900																								
Michie Tavern Water Main Replacement	1705-100	0%	JL																										
Ivy Water Main Extension	1727-100	100%	JL																										
Scottsville Phase 3 Water Main Replacement		0%	AM		350,000																								
Berkeley Water Main Replacement	1896-100	0%	MV	1,400,000	848,000																								
Crozet Phase 3 Water Main Replacement	1734-100	0%	JL	197,400																									
Glenmore Tank	1709-100	100%	JL		975,000																								
Ivy Road - Flordon Water Connection	1710-100	50%	JL	160,000																									
Ednam Pump Station Upgrade	1710-100	0%	JL	215,000																									
Orchard Acres Water Main Replacement	1890-100	0%	MV	450,000	1,061,600																								
Key West - Dunlora Water Connection	1702-100	0%	MV	768,300																									
Barterbrook Phase 2 Water Main Replacement		0%			147,000																								
Greenbrier Drive Sewer Replacement	1816-100	0%	JL	25,507	152,290																								
Oak Hill Sewer Phase 2	1802-100	100%	JL	345,000																									
Pantops Drainage Basis SSES		0%			250,700																								
Camelot Drainage Basin SSES	1813-100	0%	MV	210,500	154,100																								
Miscellaneous Sewer Rehabilitation	1806-100	0%	JL	400,000	400,000																								
PVCC Drainage Basin Rehabilitation	1808-100	0%	MV	80,700																									
Oak Forest Pump Station Abandonment	1807-100	0%	AM	105,000																									
Peter Jefferson Place Pump Station Improvements	1815-100	0%	AM	105,000																									
Airport Sewer Collector Upgrade Evaluation	1814-100	100%	JL	50,000																									
West Leigh Water Main Replacement Phase 3	1893-100	0%	AM	65,000																									
Autumn Hill Water Meter Relocation	1717-100	0%	AM																										
Madison Park Pump Station Upgrade	1735-100	0%	MV		60,000																								
East Market Street Water Main Replacement	1728-100	0%	AM																										
Fontana Water Loop Connections		0%			62,300																								
West Woods Water Main Replacement		0%			155,700																								
Ridgewood PRV/Meter Upgrade	1721-100	0%	MV																										
Automatic Flushing Assemblies	1729-100	0%	AM																										
Camp Holiday Trails Chlorine Residual Evaluation	1724-100	0%	JL																										
SCADA System	1605-100	100%	MV	70,000	245,400																								
Ashcroft Pump Stations #2 & #3 Capacity Improvement	1879-100	0%	MV		312,000																								
Developer Participation		100%		100,000	100,000																								
Total Capital Projects to be appropriated in the Fiscal Year				$ 5,700,369	6,405,890																								

In house construction | Engineering | Construction