

Washington County Service Authority Board of Commissioners
November 28, 2011 Regular Meeting Minutes

The regular meeting of the Washington County Service Authority Board of Commissioners was called to order by the Chairman at 7:06 PM.

ROLL CALL

Commissioners Present:

Mr. Joe Chase, Chairman
Mr. D.L. Stout, Vice Chairman
Mr. Prince Coleman
Mr. Dwain Miller
Mr. Frank Stephon, IV
Mr. Kenneth Taylor

Commissioners Absent:

Mr. Devere Hutchinson

WCSA Staff Present:

Robbie Cornett, General Manager
Kimberly Harold, Controller
Amanda Paukovitz, Administrative Assistant
Mark Osborne, Technical Manager
April Helbert, Staff Engineer

Consultants Present:

Bobby Lane, PE, The Lane Group, Inc.
Kevin Heath, PE, Adams-Heath Engineering
Stevie Steele, PE, Anderson & Associates
Jay Lester, PE, Draper Aden Associates
Matthew Lane, PE, The Lane Group, Inc.

Also Present:

Mrs. Dawn Figueiras, General Counsel
WCSA Employees

3. Approval of the Agenda

Mr. Cornett had no corrections or additions to the agenda.

Mr. Stephon made the motion to approve the Agenda. Mr. Stephon's motion was seconded by Mr. Coleman and was approved by a 6-0-0-1 Board vote.

4. Public Query & Comment

There was no Public Query & Comment.

5. Approval of the Consent Agenda

- Minutes: October 24 Regular

Meeting.

- Routine Reports for October 2011.
- Financial Statement for October 2011.
- Check Register and General Manager Financial Report for October 2011.

Mr. Miller made the motion to approve the Consent Agenda. Mr. Miller's motion was seconded by Mr. Stout and was approved by a 6-0-0-1 vote of the Board.

6. Engineer's Report and Update

Mr. Kevin Heath of Adams-Heath (A-H) Engineering reported on the following projects:

- **Abingdon Storage Tank Study**

They are continuing to work and gather background information. They are working on negotiations for interior and exterior tank inspections.

- **Green Springs Road Waterline Replacement**

Field surveys and markups, along with a preliminary draft set of plans, have been finished; they hope to have plans ready in two weeks.

- **Whites Mill Road Improvements**

Project is under construction and currently, the tank is being filled. Contractor was able to complete testing of the line segments from the pump station to the tank so the tank can be filled and a substantial completion date for the tank (Mid Atlantic) and pump station (Sun Contractors) can be scheduled; they are optimistic to complete that portion next week.

There is still a fair amount of work outstanding with Contract 1 (Tipton Construction), give or take 7,000 feet outstanding, 100 connections and 6 existing pump stations. A construction progress meeting is scheduled for tomorrow. They hope to get a better

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grasp of when to close out the project. At the last progress meeting, the contractor indicated he would need, give or take, 60 days until completion. They are 30 days in and completion by the contractor within 30 days would probably be optimistic. There is a later agenda item to address this issue.

Mr. Stevie Steele of Anderson & Associates (A&A) reported on the following project:

- **Exit 13 Sewer Project Phases 2 & 3**

At WCSA Staff's request, they have reevaluated the service areas and have completed cost updates. They are in the process of actual house counts (per tax parcel). A&A has found that some parcels do not have houses. The cost per connection has to be based on actual homes, in order to generate necessary revenue. The project has been broken into two phases (Phases A and B). Once they have the actual house counts, they will be able to decide if the project meets the threshold. A&A should have a draft document of the house counts and cost breakdowns later this week.

Mr. Jay Lester of Draper Aden Associates (DAA) provided the following update:

- **Route 58 Water Storage Tank**

Mr. Lester distributed a handout. As far as the status of the work, it is complete, including the punch list items. In order to close out the project, there is a need for the approval of a change order and amendment. The largest needed items are a structured pipe and some additional erosion sediment control items. Also, there were some additional erosion and undercut items due to unforeseen conditions. The Final Change Order increases the project cost by \$42,869.79 and by additional work days (weather

and summer days, due to reasoning outside of the contractor's control), detailed in Attachment B. This has been submitted to RD for approval. RD has said they cannot furnish the cost of unused materials: \$12,025.80; WCSA will need to cover that amount. Mr. Lester offered to answer the Board's questions.

Upon Mr. Chase's inquiry, Mr. Cornett expressed that the details of the change order were finalized today. However, he and Staff do find the change order to be in good order.

Mr. Lester discussed the amendment. The entire project was completed one month later than expected. This delay can be attributed to Contract 1 delays. Although the project was only one month late, Contract 1 lasted much longer. Earlier in the project, WCSA Staff and DAA discussed the likelihood of liquidated damages on Contract 1. They eventually determined that the contractor was 55 days late of completing the critical part of the contract. He later encountered problems in late April beyond his control. The contractor incurred additional costs and although he was responsible for the earlier delays, he was not responsible for the latter. He submitted costs and when DAA evaluated these costs, they seemed to offset the liquidated damages. With the amendment, it says there will not be any liquidated damages or increases in costs. RD and Staff have seen this; all parties think this amendment is the best solution. Mr. Lester offered to answer any questions for the Board. As confirmed by Mrs. Figueiras, Legal Counsel also agrees with this action. Mr. Stephon made a motion to approve the change order to increase the contract price by \$42,869.79 and the amendment

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that increases the contract by the necessary number of days (see attached). Mr. Stephon's motion was seconded by Mr. Stout and was approved by a 5-1-0-1 vote of the Board [1: Mr. Taylor abstained, due to conflict of interest]. Mr. Lester provided the approved documents for signature by Mr. Cornett and to then be forwarded to RD.

Mr. Bobby Lane of The Lane Group, Inc. (TLG) reported on the following projects:

- **Drinking Water Treatment Plant Expansion (6.6 MGD to 12 MGD) and Raw Water Intake**

The energy recovery building is nearing completion and the contractor has completed excavation. He has gotten into forming steel, pouring concrete for new foundation and the work is currently on schedule. Intake excavation is complete. The contractor has begun forming reinforcement steel and pouring concrete; they plan to begin the directional bore very soon.

- **Bristol Area Water Restructuring Project**

Last meeting, the Board instructed TLG to talk to the low bidder, Crosspointe Contractors, who is comfortable with the time table and budget. In response, TLG will prepare the Notice to Award papers.

- **Exit 13 Sewer Project Phase 1 & Exit 14 Project**

Mr. Lane informed the Board that the projects will now be referred to as the Exit 13 Project and Exit 13 Force Main Project (renamed from the Exit 14 Project); that seemed to please funding agencies. Since the last meeting, RD has delivered a letter of conditions and they are in the process of completing contract documents. Mrs. Figueiras has reviewed the documents and signed off on them. They are hoping to have a pre-

construction conference and loan closing by the end of year (which would lock in an interest rate of 2.25%). Funding is in place. DEQ has advised that they are funding the Exit 13 Force Main with funds that were previously awarded for a project that can no longer be done. They are working on design and hope to advertise by the end of year.

- **Galvanized Line Replacement Project**

Division 1 and 2 are finished. Due to the work of the contractor and VDOT, they have saved money in road restoration: \$3-400,000 in additional funds. They are looking at two trailer parks next to Bristol and the Woodland Hills area to replace Galvanized Line (Note: they had originally planned to complete these replacements in Phase 2). Boring Contractors has asked for a winter shutdown in the Downtown Abingdon area for the winter; they are preparing accordingly.

- **Interim Water Treatment Plant Expansion (4.6 MGD to 6.6 MGD)**

This project expands the plant from 4.6 to 6.6 MGD. Contractor has completed that work and is in process of the final clean up and paperwork for the Interim Water Plant. TLG will report with final paperwork at the December meeting.

- **Mid Mountain System Improvements Preliminary Engineering Report (PER)**

The PER was completed and is under final review at their office. They plan to submit it to Staff for final review in the next week.

- **Damascus Sewer Study**

Mr. Lane will make a presentation later in the meeting.

- **Western Washington County Sewer Study**

The project is centered on WCSA and

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TLG working with IDA to submit an application to the Tobacco Commission. The funding application has been submitted and we hope to hear back positively in January.

Mr. Chase asked some questions about the gravel area around the South Fork Intake; Mr. Lane answered his questions.

7. Water & Wastewater Construction Projects Report and Update

Mrs. Helbert referred to the Engineering Report in the Board Books, printed on purple paper. She provided the following updates:

- **Rich Valley Road/Maiden Creek**

Construction is complete and in service. Following Mrs. Helbert's report, Mrs. Figueiras presented the following from Mr. Mark Lawson's notes:

On November 8 [erroneously listed as November 17, but later corrected by Mrs. Helbert], a meeting took place at the WCSA Administrative Office between WCSA Staff, Legal Counsel, Board Members and Mitchell Crabtree of Crosspointe Contracting. The meeting was attended by Robbie Cornett, Mark Osborne, April Helbert, Dwain Miller, Frank Stephon and Mark Lawson.

Mr. Crabtree basically made the same points at this meeting from his letter of September 29 [2011]. His primary claim is that because of extraordinary hardness of rock, his company was delayed in constructing the water line on Maiden Creek. He was originally given 270 calendar days, later expanded to 340 calendar days (over 48 weeks), to complete the project. The company installed all water line in 186 days. We assumed he referenced actual working days. With five days per week, this amounts to 37 weeks, and with six days per week, this amounts to 31 weeks. The contractor thus had an additional 55 working days (at five per week) and 102 working days (at six per week) to perform other project work. Those in attendance thought this was more

than adequate for the contractor to have completed the work before the substantial completion date of September 26 [2011]. When questioned by the Committee, Mr. Crabtree had no reasonable explanation for his failure to comply with the notice requirements set out in the contract. Anecdotal evidence demonstrated that this contractor has had quality problems in the past, and that reasons for delay also included failure to adequately staff the project, failure to properly run the project, and failure to quickly repair machinery. While consideration was given by the Committee to add five working days for installation of additional water line (which would have reduced the proposed liquidated damages), the consensus was that this should not be done in fairness to WCSA and other bidders, and in consideration of other ongoing projects, which may also experience time-of-completion issues. The consensus was that the contractor had not properly utilized the time provided under the contract and extensions thereof earlier granted. Therefore, the Committee recommends the pursuit of liquidated damages in the amount of \$6,300.

Mr. Miller made the motion to pursue \$6,300 in liquidated damages from Crosspointe Contracting. Mr. Miller's motion was seconded by Mr. Stephon and was approved by a 5-1-0-1 vote of the Board [1: Mr. Taylor opposed].

- **South Fork River Crossing**

Project was awarded to Farmers Construction and has begun. The contractor has installed 40 feet of line and hopes to have at least an additional 60 feet in by the end of the week.

- **Harmony Hills**

The line is installed and testing is complete. The punch list went to the contractor; they are awaiting the results.

8. General Manager's Report & Update

Mr. Cornett referenced his General

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Manager's report at the Board's stations. He reported on the following noteworthy WCSA performance & accomplishments from all departments during October:

Water Production

- Produced little over 199 million gallons of drinking water.
- Continued coordination and support of the expansion of our Middle Fork Drinking Water Plant, as well as construction of the Appalachian Power Company Arrowhead Substation.

Distribution

- Coordinated the outside purchase of little more than 18 million gallons of drinking water (lowest amount of the calendar year).
- In total, 7.028 million gallons per day (MGD) of drinking water was distributed to our customers (lowest amount of the calendar year; water demand is decreasing as fall comes).
- Continued coordination and support of WCSA's ongoing capital projects.

Meter Department

- 133 customers were telephoned following unusually high usage.
- 8 meters were lifted for non-payment.

Customer Service

- Little more than \$22,000 was abated for water leaks on approximately 122 customer accounts.
- More than \$3,400 was written off as bad debt three years old.
- 8 water taps and 2 wastewater tap were applied for.
- Managed 170 reconnections/transfer of service requests in the last month.
- Late charges were added to 4,300 (almost 4,400) accounts.
- 1,146 disconnect notices were processed, resulting in 8 disconnects for non-payment.

Maintenance

- Has been busy.
- Repaired 31 leaks and 12 breaks.
- Constructed 58 water taps (45 on the Rich Valley Road/Maiden Creek Road

and Chestnut Ridge Road Projects).

- Responded to 60 after hour call-outs.
- Assisted Galvanized Line contractors with mainline taps and ongoing prospecting.

Wastewater

- Treated 9.7 million gallons of wastewater in the last month.

Administrative Items

- Represented WCSA at a Joint County Utilities Meeting on October 3 at the County Office Building.
- Represented WCSA at the Virginia Economic Development Partnership meeting concerning Oak Park on October 13.
- Represented WCSA at a Board of Supervisors Meeting on October 25 regarding the Oak Park Sewer Project.
- July through October has resulted in changes to the nonresidential connection fees that are *pending or paid* in our water systems for the current fiscal year. Mr. Cornett referenced an updated report in detail, which was attached to the General Manager's Report. Applications for four connections have been made and paid.

9. Consideration of a Holiday Gift and Lunch for WCSA Employees

Mr. Cornett referred to a report in the Board Update and referenced Mr. Hutchinson's message at the Board's stations. Mr. Cornett explained that for approximately 23 years, the Board has considered a cash gift for full and part-time employees. For the past 14 years, the Board has considered award of a cash gift along with a luncheon. In 2009, the cash gift was increased from \$200 to \$300 (both after taxes) and included a barbeque lunch. He also provided for the Board information regarding what other localities/utilities are doing for their employees, such as: John Flanagan Water Authority (Haysi/Dickenson County), Town of Abingdon, Bristol

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Virginia Utilities, Virginia Highlands Airport Authority and the Town of Chilhowie. Although it is hard to compare the total for holiday bonuses, WCSA is probably mid-pack at best, if not a little below our neighbors.

He stated that overall, WCSA Staff has done very well over the past year in a number of areas. Compensation is in order and there have been a number of employees recognized by AWWA, RD, VDH and other organizations. For that reason, Mr. Cornett recommended the Board favorably consider a \$300 cash gift (after taxes) and a barbeque luncheon for Staff again this year. Mr. Stout moved to change the motion, resulting in WCSA Staff receiving a cash bonus of \$400 after taxes and a barbeque lunch. Upon Mr. Stout's motion, a second by Mr. Stephon and a 6-0-0-1 vote of the Board, the aforementioned was approved.

Mr. Cornett thanked the Board for their gift. He assured it would be greatly appreciated by WCSA Staff.

10. Town of Damascus Sewer Study Report and Presentation

Mr. Bobby Lane noted that The Lane Group/Olver, Inc. have held many meetings that have included WCSA Staff Members (Robbie Cornett, Mark Osborne, April Helbert and Tommy Dotson) and Staff/Counsel Members for the Town of Damascus [erroneously referred to as the Town of Abingdon]. With the assistance of Mr. Matthew Lane, Mr. Bobby Lane made a 30 minute presentation regarding the study. Mr. Lane reviewed various topics through slides titled: Existing System, Future Issues, Future Issues- Service Area Expansion, Future Issues- Improvements for I&I [Inflow & Infiltration] (4 slides),

Future Issues- Potential Improvements for Nutrient Removal, Future Issues- Watershed Protection, Funding Alternatives, Conclusions & Recommendations (2 slides) and Questions. He explained they plan to present the findings of the Study at the Town of Damascus December Meeting, to be held on December 5. The Town will also hold a public hearing at the meeting concerning this project and if WCSA and the Town are in agreement, there is a joint meeting scheduled for December 19. Mr. Lane offered to answer the Board's questions.

Mr. Miller inquired of the types of line in the Damascus Sewer System. Mr. Lane noted there is some PVC, ductile iron and possibly some asbestos. Mr. Miller also inquired about I&I. Mr. Lane explained that Mr. [Matthew] Lane and Mr. Osborne completed some night flow testing and found inflow is coming system-wide. He expressed they are proposing some permanent flow monitoring stations be established at some key manholes to fully answer that question.

Mr. Taylor inquired how much line is underwater; Mr. Lane explained there are less than a dozen interceptor stream crossings. Most interceptors are typically on one side or the other; none in the center. He explained this matter in detail. Mr. Lane noted the Town has recently done some smoke testing, has located some private sources of I&I and has made a real effort to have those removed; this was confirmed by some follow-up smoke testing.

Mr. Matthew Lane added there are some sections of sewer line in the stream, but a project by the Town replaced many of those sections of line. The inflow was coming from everywhere when he and

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Mr. Osborne completed night testing. Discussion erupted amongst the Board. Mr. Chase asked if interim improvements would be made within the next five years. Mr. Bobby Lane expressed yes they would, but they are not required; improvements would make operation of the plant more efficient. In long term, the improvements would save WCSA some money. Due to some SCADA issues, by adding telemetry, WCSA might be able to reduce DEQ's requirement for manning the facility. A decrease in manpower would generate that money back over a few years. Mr. Taylor inquired with the total cost of \$205,000 if WCSA and the Town of Damascus would pay as they go and if there would be any profit. Mr. Lane affirmed that there is no profit and out of the \$205,000, \$54,000 would be debt repayment. The Town of Damascus does not have a debt reserve and these improvements could not be funded with the existing rates. The project will be based on month-by-month funding. On behalf of the Board, Mr. Chase thanked The Lane Group for their presentation and asked the Board if there were any additional questions.

11. Consideration of a USDA Rural Development Loan Resolution and Bond Resolution for the Exit 13 Phase 1 Project

Mr. Cornett referred to the Board Update and the resolutions at the Board's stations. As the Board knows, the Exit 13 Phase 1 Project constructions bids came in at about \$1.6 million more than available funding. We were disappointed in the overrun, but Mr. Cornett is pleased to report WCSA has a funding offer of these additional funds from RD for the shortfall. He wanted to thank The

Lane Group and WCSA Staff for their tireless efforts to secure this funding; he expressed his appreciation. Mr. Cornett explained that the original funding package had an interest rate of 2.75%. However, if we are able to close that loan and the additional overrun funds by the end of next month, WCSA will receive an interest rate of 2.25% for the total loan of about \$3.2 million; this will result in about \$400,000 in savings. He offered to answer any questions the Board may have and recommended the consideration of both the Loan and Bond Resolutions.

Mr. Taylor made the motion to approve the Loan and Bond Resolutions for the Exit 13 Phase 1 Project (see attached). Mr. Taylor's motion was seconded by Mr. Stout and was approved by a Board vote of 6-0-0-1.

12. Emory-Meadowview-Glade Spring Sewer Study

Mrs. Helbert provided some background information. Since the construction of the Emory/Meadowview Sewer System in 1995, which included the Hall Creek Wastewater Treatment Facility, the Glade Spring Sewer System was built shortly after. In 1999, WCSA acquired the Washington County Industrial Park Wastewater Collection and Treatment System near Exit 22 [of Interstate 81]. The treatment system was taken offline in 2005. Presently, wastewater generated at this industrial park is conveyed through the Emory/Meadowview Collection System to the Hall Creek Wastewater Treatment Plant. Since the construction of the Southwest Virginia Regional Jail a few years ago, the capacity of our Abingdon Steel Pump Station has been exceeded. The peak flows at the pump station receiving the

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wastewater from the jail greatly exceed that which was projected.

For these reasons, WCSA needs to evaluate the Abingdon Steel Pump Station and all primary infrastructure between the pump station and the Hall Creek Treatment Facility to determine any improvements that need to be made. This is not only to accommodate our existing customers in the area (which number approximately 700), but any prospective customers that may wish to join the system in the future.

WCSA Staff has reviewed and negotiated a contract for this work with The Lane Group to perform this study for \$85,500.

Mrs. Helbert offered to answer any questions the Board may have.

Mr. Chase inquired about the funding application to Mount Rogers Planning District Commission (MRPDC). He knows that it had failed, but asked if the study would proceed with WCSA funds. Mr. Cornett explained that WCSA had sufficient funds in its budget for the Study. However, studies of this nature are often funded by MRPDC, so WCSA had wanted to try for any funding they could secure. He explained that WCSA wants to look at the section of Lee Highway just north of JMH for desirability and feasibility of extending public sewer service for current residents and anticipated growth.

Mr. Chase asked if there were any questions by the Board.

Mr. Stout made the motion to approve the contract for the Emory-Meadowview-Glade Spring Sewer Study with The Lane Group for \$85,500 (see attached). Mr. Stout's motion was seconded by Mr. Coleman, and was approved by a Board vote of 6-0-0-1.

13. Consideration of an Amendment to the WCSA/Adams-Heath Engineering Services Agreement for the Whites Mill Road Water System Improvements Project

Mrs. Helbert noted that as Mr. Heath has reported for the last couple months, the linework contractor for the Whites Mill Road Water System Improvements Project is behind schedule. In result, the project has run over on time. They did try to allot for additional time, but the project has exceeded this. Mr. Heath and WCSA Staff recommend what they feel is a reasonable amendment for \$32,400 to get the project to about the first week of March. She explained that is an hourly, not to exceed, rate; WCSA would only pay for the amount used. Mr. Taylor inquired if the contractor for this portion of the project is Tipton Construction; Mr. Heath and Mrs. Helbert affirmed this.

Mr. Miller made the motion to approve the Amendment to the Service Agreement for \$32,400 and to extend the project time until the end of February (see attached). Mr. Miller's motion was seconded by Mr. Stephon and was approved by a Board vote of 6-0-0-1.

14. Closed Meeting: Personnel, Acquisition and Disposition of Property, Investment of Public Funds & Legal Advice

Mr. Stephon moved that the Board adjourn to Closed Meeting in accordance with the Virginia Freedom of Information Act, Code of Virginia § 2.2-3711 Paragraph (A) (1): Personnel, 1. To Discuss and Consider Prospective Candidates for Employment, Assignment, Appointment, Performance, Demotion, Salaries, Disciplining or Resignation of Employees of the Public

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Body, Code of Virginia § 2.2-3711 Paragraph (A) (3): Acquisition and Disposition of Property, 2. To Discuss and Consider the Acquisition of Real Property, Code of Virginia § 2.2-3711 Paragraph (A) (6): Investment of Public Funds, 3. To Discuss Various Inter-municipal and Other Agreements, Code of Virginia § 2.2-3711 Paragraph (A) (7): Legal Advice, 4. To Discuss Potential Litigation, 5. To Discuss Various Inter-municipal and Other Agreements, 6. To Discuss Potential Contract Litigation.

In addition to the Board, the presence of Mrs. Dawn Figueiras, WCSA Counsel, and Mr. Robbie Cornett, WCSA General Manager, are requested.

Mr. Stephon's motion was seconded by Mr. Stout and was approved by a 6-0-0-1 vote of the Board. The Board adjourned to Closed meeting at 8:39 PM.

Return to Public Session

Upon a motion by Mr. Taylor, a second by Mr. Stout, and a 6-0-0-1 vote of the Commissioners, the Board returned to Public Session at 10:55 PM.

Mr. Stephon read the following:
Certification of Closed Meeting
Whereas, the Washington County Service Authority has convened a Closed Meeting on this date pursuant to an affirmative recorded vote and in accordance with the provisions of the Virginia Freedom of Information Act; And whereas, § 2.2-3712 Paragraph D of the Code of Virginia requires a certification by this Authority that such Closed Meeting was conducted in conformity with Virginia law;

Now, therefore, be it resolved that the Authority hereby certifies that to the best of each member's knowledge, (1) only public business matters lawfully exempted from open meeting

requirements by Virginia law were discussed in the Closed Meeting to which this certification resolution applies, and (2) only such public business matters, as were identified in the motion convening the Closed Meeting were heard, discussed or considered by the Authority.

AYE: Mr. Miller, Mr. Stephon, Mr. Chase, Mr. Coleman, Mr. Taylor and Mr. Stout.

15. Late Items

Late Item #1: Updated Bond Resolution for Consideration

Mrs. Harold noted that Bond Counsel emailed her at 9PM while the Board was in Closed Meeting with a corrected copy of the Bond Resolution [that was approved by the Board during Agenda Item #11] for consideration. Bond Counsel informed Mrs. Harold that RD has requested this Bond be made on parody with the other Exit 13 Bond. Bond Counsel had forgotten to forward the updated Bond Resolution for consideration until 9PM. She noted the Updated Bond Resolution at the Board's Stations, with proposed changes noted in double underscore or strikethrough. Mrs. Harold offered to call Bond Counsel or to personally answer any questions the Board may have regarding the Updated Bond Resolution for consideration. Mr. Chase inquired if the situation raised any questions for Mrs. Harold. She affirmed that she had no questions, as parody is normal on this kind of bond. She was surprised it had not been included in the first place.

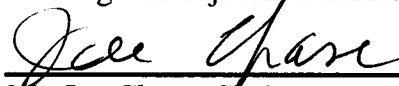
Mr. Stephon made the motion to approve the revised bond resolution (see attached). Mr. Stephon's motion was seconded by Mr. Coleman and was approved by a 6-0-0-1 vote of the Board.

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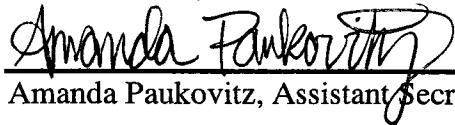
Mr. Taylor inquired if the Board could have a Christmas Supper prior to the December Regular Board Meeting. Discussion erupted amongst the Board and WCSA Staff. Mr. Cornett affirmed that dinner will be served for the Board prior to the December 19, 2011 Board Meeting at 5:30PM (Note: December Meeting is scheduled for a week early due to the holiday).

16. Adjourn or Recess

Mr. Stephon made the motion to adjourn. Mr. Stephon's motion was seconded by Mr. Stout and was approved by a 6-0-0-1 vote of the Board. The meeting was adjourned at 11:02 PM.



Mr. Joe Chase, Chairman



Amanda Paukovitz, Assistant Secretary

Change Order No. 2

Date of Issuance: November 28, 2011

Effective Date: November 28, 2011

Project: Route 58 Water Storage Utilities	Owner: Washington County Service Authority	Owner's Contract No.: N/A
Contract: Contract 1 – Site Preparation		Date of Contract: June 9, 2010
Contractor: W-L Construction and Paving, Inc.		Engineer's Project No.: B05121-06

The Contract Documents are modified as follows upon execution of this Change Order:

Description:

Change in Contract Price: See Attachment A

Change in Contract Time: See Attachment B

Attachments (list documents supporting change):

1. Attachments A & B

2. By reference, Amendment to Agreement between Owner and Contractor, dated November 28, 2011.

CHANGE IN CONTRACT PRICE:

Original Contract Price:

\$ 1,925,074.99

Increase from previously approved Change Order

No. 1

\$ 152,160.48

Contract Price prior to this Change Order:

\$ 2,077,235.47

Increase of this Change Order:

\$ 42,869.79

Contract Price incorporating this Change Order:

\$ 2,120,105.26

CHANGE IN CONTRACT TIMES:

Original Contract Times: ☐ Working days ☒ Calendar days

Substantial completion (days): 120 (Part 1); 165 (Part 2)

Ready for final payment (days or date): 195

Increase from previously approved Change Order No. 1

Substantial completion (days): 21

Ready for final payment (days): 21

Contract Times prior to this Change Order:

Substantial completion (days): 141 (Part 1); 186 (Part 2)

Ready for final payment (days): 216

Increase of this Change Order:

Substantial completion (days): 81 (Part 1); 206 (Part 2)

Ready for final payment (days): 206

Contract Times with all approved Change Orders:

Substantial completion (days): 222 (Part 1); 392 (Part 2)

Ready for final payment (days): 422

RECOMMENDED:

By: Jay S. Lento
Engineer (Authorized Signature)

Date: 11/17/11

Approved by Funding Agency (if applicable):

ACCEPTED:

By: Robert L. Le
Owner (Authorized Signature)

Date: 29 NOVEMBER 2011

ACCEPTED:

By: James L. Lento
Contractor (Authorized)

Date: 11/21/11

Date:

[illegible]

ROUTE 58 WATER STORAGE FACILITIES –CONTRACT 1

CHANGE ORDER NO. 2 – ATTACHMENT B

Additions to Contract Time

1. Additional sediment trap and rock check dams (Work Change Directive No. 2) - 4 days
2. Additional spring line (Work Change Directive No. 3) – 1 day
3. Approved weather days – 76 days (after conversion of work days to calendar days and subtraction of 4 days/month per Paragraph SC-12.03.A of the Supplementary Conditions).
4. Delays largely beyond Contractor's control (pertaining to Part 2 work) – 125 days (based on the date that substantial completion *might* have been achieved if not for leaks on the WCSA system [April 23, 2011], and the date that substantial completion was actually achieved [August 26, 2011]).

Summary of Additions to Contract Time

1. Substantial Completion of Part 1: 81 days (4 + 1 + 76)
2. Substantial Completion of Part 2: 206 days (4 + 1 + 76 + 125)
3. Final Completion: 206 days (4 + 1 + 76 + 125)

AMENDMENT to

Agreement between Washington County Service Authority (Owner) and W-L Construction and Paving Inc. (Contractor), dated June 9, 2010, for Route 58 Water Storage Facilities – Contract 1 – Site Preparation

This Amendment, dated November 28, 2011, to be executed in conjunction with Change Order No. 2, amends the Agreement as indicated below.

SPECIFICATION SECTION 01110

Replace Paragraph 1.05.A with the following: The Work under this Contract must be adequately completed before work under Contract 2 can begin. Thus the Contractor shall complete whatever work is necessary to allow Contract 2 to commence and progress, without hindrance, within the time stipulated in the Agreement. The Work under this paragraph ("Part 1" of the Work) includes grading of the tank site and access road as a minimum, and any other work necessary to allow the work under Contract 2 to progress without delays or interference.

ARTICLE 4 – CONTRACT TIMES

Based on Paragraphs 4.02 and 4.03, and Change Orders No. 1 and No. 2, the Contract Times are 222 days for substantial completion of Part 1, 392 days for substantial completion of Part 2, and 422 days for final completion. Substantial completion of Part 1 was achieved on March 25, 2011 (277 days), and substantial completion of Part 2 was achieved on August 26, 2011 (431 days).

Paragraph 4.03 (concerning liquidated damages) stipulates that the Contractor pay the Owner for delays in achieving completion of the Work. However, primarily because of leaks on the Owner's water system, the Contractor incurred significant additional costs related to searching for leakage, retesting, and delay in being able to achieve completion of the Work. Based on the Engineer's evaluation of the Contractor's cost submittal, and Engineer's and Owner's construction observation reports, the Owner agrees that these costs appear to offset potential liquidated damages. Thus the Owner and Contractor agree that a change in Contract Price will not be issued for the aforementioned additional costs and liquidated damages will not be assessed for delays in completion of the Work.

The parties hereto have executed this Agreement:

OWNER: Washington County Service
Authority

By (Signature): 

Typed Name: Robbie Cornett

Title: General Manager

Date: 28 NOVEMBER 2011

CONTRACTOR: W-L Construction and
Paving Inc.

By (Signature): 

Printed Name: Jess L. Norman

Title: PM

Date: 11/21/11

AGENCY CONCURRENCE:

By : _____

Name: _____

Date: _____

LOAN RESOLUTION
(Public Bodies)

A RESOLUTION OF THE

Board of Directors

OF THE

Washington County Service AuthorityAUTHORIZING AND PROVIDING FOR THE INCURRENCE OF INDEBTEDNESS FOR THE PURPOSE OF PROVIDING A
PORTION OF THE COST OF ACQUIRING, CONSTRUCTING, ENLARGING, IMPROVING, AND/OR EXTENDING ITS
Sewer

FACILITY TO SERVE AN AREA LAWFULLY WITHIN ITS JURISDICTION TO SERVE.

WHEREAS, it is necessary for the

Washington County Service Authority

(Public Body)

(herein after called Association) to raise a portion of the cost of such undertaking by issuance of its bonds in the principal amount of

ONE MILLION SIX HUNDRED SEVENTY-SEVEN THOUSAND AND XX / 100 DOLLARS (1,677,000.00)

pursuant to the provisions of

Chapter 28, Title 15.1, Code of VA, 1950

; and

WHEREAS, the Association intends to obtain assistance from the United States Department of Agriculture, (herein called the Government) acting under the provisions of the Consolidated Farm and Rural Development Act (7 U.S.C. 1921 et seq.) in the planning, financing, and supervision of such undertaking and the purchasing of bonds lawfully issued, in the event that no other acceptable purchaser for such bonds is found by the Association:

NOW THEREFORE, in consideration of the premises the Association hereby resolves:

1. To have prepared on its behalf and to adopt an ordinance or resolution for the issuance of its bonds containing such items and in such forms as are required by State statutes and as are agreeable and acceptable to the Government.
2. To refinance the unpaid balance, in whole or in part, of its bonds upon the request of the Government if at any time it shall appear to the Government that the Association is able to refinance its bonds by obtaining a loan for such purposes from responsible cooperative or private sources at reasonable rates and terms for loans for similar purposes and periods of time as required by section 333(c) of said Consolidated Farm and Rural Development Act (7 U.S.C. 1983(c)).
3. To provide for, execute, and comply with Form RD 400-4, "Assurance Agreement," and Form RD 400-1, "Equal Opportunity Agreement," including an "Equal Opportunity Clause," which clause is to be incorporated in, or attached as a rider to, each construction contract and subcontract involving in excess of \$10,000.
4. To indemnify the Government for any payments made or losses suffered by the Government on behalf of the Association. Such indemnification shall be payable from the same source of funds pledged to pay the bonds or any other legally permissible source.
5. That upon default in the payments of any principal and accrued interest on the bonds or in the performance of any covenant or agreement contained herein or in the instruments incident to making or insuring the loan, the Government at its option may (a) declare the entire principal amount then outstanding and accrued interest immediately due and payable, (b) for the account of the Association (payable from the source of funds pledged to pay the bonds or any other legally permissible source), incur and pay reasonable expenses for repair, maintenance, and operation of the facility and such other reasonable expenses as may be necessary to cure the cause of default, and/or (c) take possession of the facility, repair, maintain, and operate or rent it. Default under the provisions of this resolution or any instrument incident to the making or insuring of the loan may be construed by the Government to constitute default under any other instrument held by the Government and executed or assumed by the Association, and default under any such instrument may be construed by the Government to constitute default hereunder.
6. Not to sell, transfer, lease, or otherwise encumber the facility or any portion thereof, or interest therein, or permit others to do so, without the prior written consent of the Government.
7. Not to defease the bonds, or to borrow money, enter into any contractor agreement, or otherwise incur any liabilities for any purpose in connection with the facility (exclusive of normal maintenance) without the prior written consent of the Government if such undertaking would involve the source of funds pledged to pay the bonds.
8. To place the proceeds of the bonds on deposit in an account and in a manner approved by the Government. Funds may be deposited in institutions insured by the State or Federal Government or invested in readily marketable securities backed by the full faith and credit of the United States. Any income from these accounts will be considered as revenues of the system.
9. To comply with all applicable State and Federal laws and regulations and to continually operate and maintain the facility in good condition.
10. To provide for the receipt of adequate revenues to meet the requirements of debt service, operation and maintenance, and the establishment of adequate reserves. Revenue accumulated over and above that needed to pay operating and maintenance, debt service and reserves may only be retained or used to make prepayments on the loan. Revenue cannot be used to pay any expenses which are not directly incurred for the facility financed by USDA. No free service or use of the facility will be permitted.

11. To acquire and maintain such insurance and fidelity bond coverage as may be required by the Government.
12. To establish and maintain such books and records relating to the operation of the facility and its financial affairs and to provide for required audit thereof as required by the Government, to provide the Government a copy of each such audit without its request, and to forward to the Government such additional information and reports as it may from time to time require.
13. To provide the Government at all reasonable times access to all books and records relating to the facility and access to the property of the system so that the Government may ascertain that the Association is complying with the provisions hereof and of the instruments incident to the making or insuring of the loan.
14. That if the Government requires that a reserve account be established, disbursements from that account(s) may be used when necessary for payments due on the bond if sufficient funds are not otherwise available and prior approval of the government is obtained. Also, with the prior written approval of the Government, funds may be withdrawn and used for such things as emergency maintenance, extensions to facilities, and replacement of short lived assets.
15. To provide adequate service to all persons within the service area who can feasibly and legally be served and to obtain USDA's concurrence prior to refusing new or adequate services to such persons. Upon failure to provide services which are feasible and legal, such person shall have a direct right of action against the Association or public body.
16. To comply with the measures identified in the Government's environmental impact analysis for this facility for the purpose of avoiding or reducing the adverse environmental impacts of the facility's construction or operation.
17. To accept a grant in an amount not to exceed _____

under the terms offered by the Government; that

Chairperson

and Secretary

_____ of the Association are hereby authorized and empowered to take all action necessary or appropriate in the execution of all written instruments as may be required in regard to or as evidence of such grant; and to operate the facility under the terms offered in said grant agreement(s).

The provisions hereof and the provisions of all instruments incident to the making or the insuring of the loan, unless otherwise specifically provided by the terms of such instrument, shall be binding upon the Association as long as the bonds are held or insured by the Government or assignee. The provisions of sections 6 through 17 hereof may be provided for in more specific detail in the bond resolution or ordinance; to the extent that the provisions contained in such bond resolution or ordinance should be found to be inconsistent with the provisions hereof, these provisions shall be construed as controlling between the Association and the Government or assignee.

Yeas 6 Nays 0 Absent 1

IN WITNESS WHEREOF, the Board of Directors of the
Washington County Service Authority has duly adopted this resolution and caused it

to be executed by the officers below in duplicate on this

28th day of November, 2011

(SEAL) (if applicable)

Attest:

Kim Harold
Kim Roberts Harold

Title Comptroller

Washington County Service Authority

By

Robbie Cornett

Title

Executive Director

CERTIFICATION TO BE EXECUTED AT LOAN CLOSING

I, the undersigned, as Comptroller of the Washington County Service Authority

hereby certify that the Board of Directors of such Association is composed of

7 members, of whom 6 constituting a quorum, were present at a meeting thereof duly called and

held on the 28th day of November, 2011 that the foregoing resolution was adopted at such meeting

by the vote shown above. I further certify that as of _____

the date of closing of the loan from the United States Department of Agriculture, said resolution remains in effect and has not been

rescinded or amended in any way.

Dated, this 28th day of November

Kim Roberts
Comptroller of Washington County Service Authority

CERTIFICATE OF SECRETARY

The undersigned Secretary of the Washington County Service Authority (the "Authority"), hereby certifies that:

1. A regular meeting of the Board of the Authority (the "Board") was duly called and held on November 28, 2011 (the "Meeting"), at which the following Board members were present and absent:

PRESENT:

ABSENT:

2. A resolution (the "Resolution") of the Authority entitled "RESOLUTION AUTHORIZING AND APPROVING THE ISSUANCE, AWARD, AND SALE OF NOT TO EXCEED \$1,677,000 SEWER SYSTEM REVENUE BONDS, TAXABLE SERIES 2011B, AND SETTING FORTH THE FORM, DETAILS, AND PROVISIONS FOR THE PAYMENT THEREOF" was duly adopted at the Meeting by the recorded affirmative vote of at least a majority of all of the members of the Board of the Authority, the ayes and nays being recorded in the minutes of the meeting as shown below:

MEMBER

VOTE

3. Attached is a true and correct copy of the Resolution.

WITNESS my signature and the seal of the Washington County Service Authority this 28th day of November, 2011.

Robert Cornett
Secretary, Washington County Service Authority

[SEAL]

WASHINGTON COUNTY SERVICE AUTHORITY

**RESOLUTION AUTHORIZING AND APPROVING THE
ISSUANCE, AWARD, AND SALE OF NOT TO EXCEED \$1,677,000
SEWER SYSTEM REVENUE BONDS, TAXABLE SERIES 2011B,
AND SETTING FORTH THE FORM, DETAILS, AND
PROVISIONS FOR THE PAYMENT THEREOF**

A. The Washington County Service Authority (the "Authority") is a public body politic and corporate of the Commonwealth of Virginia (the "Commonwealth") created pursuant to the Virginia Water and Waste Authorities Act, Chapter 51, Title 15.2 of the Code of Virginia of 1950, as amended (the "Act").

B. The Authority has determined that it is necessary and desirable to issue its Sewer System Revenue Bonds, Taxable Series 2011B, in an aggregate principal amount not to exceed \$1,677,000 (the "Series 2011B Bonds"), and to use the proceeds thereof, along with other available funds, if any, to finance the costs of improvements to the sewer system including the Exit 13 sewer project, together with related expenses, including without limitation the costs of the issuance of the Series 2011B Bonds (the "Project").

C. The Series 2011B Bonds will be sold by the Authority to the United States of America, acting by and through the United States Department of Agriculture, Rural Development (the "Government"), under the terms of a letter of conditions from the Government to the Authority dated May 28, 2009, as amended by a letter from the Government to the Authority dated November 8, 2011 (as amended, the "Conditions Letter").

D. The Conditions Letter has been presented at this meeting and filed with the Authority's records.

E. In accordance with the terms of the Conditions Letter and the terms set forth in this Resolution, the Series 2011B Bonds will be secured by a pledge of the Revenues (as defined below) on parity with the Authority's outstanding Sewer System Revenue Refunding Bond, Series 2008 (the "2008 Bond" and the "Existing Parity Indebtedness"), and Additional Parity Indebtedness (as defined below).

NOW, THEREFORE, after consideration and in furtherance of the public purposes for which the Authority was created, be it resolved that:

1. **Authorization of Bonds and Use of Proceeds.** The Authority hereby finds and determines that it is advisable and in the best interest of the Authority to contract a debt and to issue the Series 2011B Bonds in an aggregate principal amount not to exceed \$1,677,000 to be designated the "Washington County Service Authority, Sewer System Revenue Bonds, Taxable Series 2011B" or such other designation as may be approved by the Chairman or Vice Chairman of the Authority. The proceeds from the issuance and sale of the Series 2011B Bonds shall be used, together with other available funds, if any, to pay the costs of the Project.

2. **Sale of Bonds and Acceptance of Conditions Letter.** After mature consideration of the possible methods of sale of the Series 2011B Bonds and current conditions of the municipal bond market, the Authority hereby finds and determines that it will benefit the customers of the Authority through the promotion of their safety, health, welfare, convenience or prosperity for the Authority to contract a debt and to issue and sell the Series 2011B Bonds to the Government and that it is in the best interest of the Authority to accept the offer of the Government to purchase the Series 2011B Bonds upon the terms set forth in the Conditions Letter. Such offer is hereby accepted, and the Authority hereby agrees to meet such terms.

3. **Details of Bonds.** The Series 2011B Bonds shall be in such denominations as requested by the Government. The series designation of the Series 2011B Bonds may be altered by the Chairman or Vice Chairman to reflect the year and sequence in which the Series 2011B Bonds are issued or the requirements of the Government. The Series 2011B Bonds shall bear interest at the rate of the lower of (i) 2.25% per year, or (ii) the rate quoted by the Government as the interest rate effective on the Closing Date (as defined below). The execution and delivery of the Series 2011B Bonds on the Authority's behalf shall conclusively evidence the interest rate stated in the Series 2011B Bonds as having been approved and authorized by this Resolution. The Series 2011B Bonds shall be in fully registered form, shall be numbered consecutively beginning with R-1 and shall be dated the date of their delivery to the Government or such other customary date required by the Government (the "Closing Date"). Installments due the first 24 months on the Series 2011B Bonds shall consist of interest only and shall be paid annually on the first and second anniversaries of the Closing Date. Payments for the next 456 months will be equal amortized monthly installments to be paid until the principal of the Series 2011B Bonds is paid in full. If not sooner paid, the final installment on the Series 2011B Bonds shall be due and payable 40 years from the Closing Date. Any payment on the Series 2011B Bonds shall be applied first to interest accrued to the payment date and then to principal. Installments shall be payable in lawful money of the United States of America and shall, in accordance with the Preauthorized Debit (PAD) payment process or such other subsequent payment process specified by the Government, be electronically debited from the Authority's account on each day payment is due.

4. **Form of Bonds.** The Series 2011B Bonds shall be in substantially the form presented at this meeting, with such variations, insertions or deletions as may be approved by the Chairman or Vice Chairman, whose approval shall be evidenced conclusively by his execution and delivery of the Series 2011B Bonds on the Authority's behalf. There may be endorsed on the Series 2011B Bonds such legend or text as may be necessary or appropriate to conform to any applicable rules and regulations of any governmental authority or any usage or requirement of law with respect thereto.

At the request of the Government, the Series 2011B Bonds may be delivered as fully registered Series 2011B Bonds in the alternative form presented at this meeting providing for principal advances to be made from time to time by the Government in an aggregate amount not to exceed \$1,677,000. An authorized officer of the Government shall enter the amount and the date of each such principal advance on the Certificate of Principal Advances attached to each of the Series 2011B Bonds when the proceeds of such advance are delivered to the Authority. Each

such principal advance shall bear interest from the date of such advance so entered on the certificate.

5. **Execution of Bonds.** The Series 2011B Bonds shall be signed by the Chairman or Vice Chairman and the Authority's seal shall be affixed thereto and attested by the Secretary or Assistant Secretary of the Authority.

6. **Registration, Transfer and Exchange.** The Series 2011B Bonds shall be fully registered as to both principal and interest. Transfer of the Series 2011B Bonds may be registered upon books maintained for that purpose at the office of the Bond Registrar. Prior to due presentment for registration of transfer, the Bond Registrar shall treat the registered owner of each Series 2011B Bond as the person exclusively entitled to payment of principal and interest and the exercise of all other rights and powers of the owner. The Treasurer of the Authority is appointed as the initial Bond Registrar. The Authority may appoint a subsequent Bond Registrar and/or one or more paying agents for the Series 2011B Bonds upon giving written notice to the registered owners of the Series 2011B Bonds specifying the name and location of the principal office of any such Bond Registrar or paying agent. The Series 2011B Bonds shall be registered initially in the name of the "United States of America."

7. **Prepayment of Bonds.** Installments of principal due on the Series 2011B Bonds may be prepaid at the option of the Authority at any time as a whole or in part from time to time (but if in part, in inverse order of maturity) without premium. Notwithstanding the above, the Authority may at any time deliver moneys to the Government with instructions that such moneys be credited against future installments due on the Series 2011B Bonds in inverse chronological order. Prepayments shall not affect the obligation of the Authority to pay the remaining installments payable as provided in Section 3 of this Resolution.

8. **Definitions.** Each of the following capitalized terms shall have the meaning given to it below:

(a) "Operating Expenses" means the costs of operating and maintaining the Sewer System determined under generally accepted accounting principles, exclusive of (i) interest on any debt payable from Revenues, (ii) depreciation and other items not requiring the expenditure of cash, (iii) any amounts expended for capital replacements, repairs and maintenance not recurring annually or reserves therefor, and (iv) reserves for administration, operation and maintenance occurring in the normal course of business.

(b) "Parity Indebtedness" means, collectively, (i) the Series 2011B Bonds, (ii) the Existing Parity Indebtedness, and (iii) any Additional Parity Indebtedness described in Section 11 of this Resolution.

(c) "Revenues" means (i) all rates, fees, rentals, charges, income and money properly allocable to the Sewer System under generally accepted accounting principles (provided that the Authority may determine to include any cash or deferred revenues derived from availability or connection fees, even if all or a part thereof are excluded from current revenues under generally accepted accounting principles) or resulting from the Authority's ownership or

operation of the Sewer System, excluding customer and other deposits subject to refund until such deposits have become the Authority's property, (ii) the proceeds of any insurance covering business interruption loss relating to the Sewer System, (iii) interest on any money or securities relating to the Sewer System held by or on behalf of the Authority, and (iv) any other money from other sources pledged by or on behalf of the Authority to the payment of the Series 2011B Bonds.

(d) "Sewer System" means all plants, systems, facilities, equipment or property owned, operated or maintained by the Authority, and used in connection with the collection and treatment of wastewater, as the same may from time to time exist.

9. **Pledge of Revenues and Debt Service Reserve.** Subject to the Authority's right to apply the Revenues to the payment of Operating Expenses, the Revenues are hereby pledged to secure the payment of the principal of and interest on the Series 2011B Bonds. This pledge shall be valid and binding from and after the issuance and delivery of the Series 2011B Bonds. The Revenues, as received by the Authority, shall immediately be subject to the lien of this pledge without any physical delivery of them or further act. The lien of this pledge of the Revenues shall be on a parity with the lien of the pledge securing the Existing Parity Indebtedness and any Additional Parity Indebtedness (as defined Section 11 of this Resolution). The lien of this pledge shall, subject to the right of the Authority to apply Revenues to the payment of Operating Expenses, have priority over all other obligations and liabilities of the Authority, and the lien of this pledge shall be valid and binding against all parties having claims of any kind against the Authority regardless of whether such parties have notice of this pledge.

In addition, the Authority shall establish a debt service reserve (the "Debt Service Reserve") pursuant to the terms of the Conditions Letter, which is hereby pledged solely to secure the payment of the principal of and interest on the Series 2011B Bonds.

10. **Covenants.** It is hereby covenanted and agreed with the registered owners of the Series 2011B Bonds that so long as any of the installments of principal or interest on the Series 2011B Bonds are outstanding and unpaid, the Authority will:

(a) Charge rates, fees and other charges to users of the Sewer System and fix and maintain such rates, fees and other charges at such level as will produce sufficient Revenues in each fiscal year of the Authority to pay (i) the Operating Expenses with respect to the Sewer System for such fiscal year, (ii) the installments of principal and interest on the Series 2011B Bonds and the other Parity Indebtedness, as the same respectively become due during such fiscal year, and (iii) to maintain the minimum requirements with respect to such fiscal year in the reserves to be established and maintained as provided in the Conditions Letter (the "Reserves"), including the Debt Service Reserve;

(b) Apply the Revenues received by the Authority in each fiscal year first to the payment of the Operating Expenses during such fiscal year, then to the payment of the installments of principal and interest on the Series 2011B Bonds and the other Parity Indebtedness becoming due during such fiscal year, then to restore the balances in the Reserves

to their minimum requirements with respect to such year, and then to any other lawful purpose of the Authority;

(c) Segregate and keep segregated from all other Authority funds all Revenues and keep proper records and accounts therefor, separate and apart from all other municipal records and accounts;

(d) Not permit connections to or use of the Sewer System or provide any services of the Sewer System without making a charge therefor;

(e) Use its best efforts to collect all rates, fees and other charges due to it, including, when appropriate, by perfecting liens on premises served by the Sewer System for the amount of all delinquent rates, fees and other charges where such action is permitted by law.

(f) To the full extent permitted by law, discontinue and shut off, or cause to be discontinued and shut off, services and facilities of the Sewer System, and use its best efforts to cause to be shut off sewer service furnished otherwise than through the Sewer System, to customers of the Sewer System who are delinquent beyond any customary grace periods in the payment of rates, fees and other charges due to the Authority.

11. **Additional Parity Indebtedness.** Subject to the provisions of Section 12 of this Resolution, the Authority may issue or incur additional bonds, notes or other evidences of indebtedness secured by a pledge of the Revenues of the Sewer System on a parity with the pledge securing the Series 2011B Bonds as provided in Section 9 of this Resolution ("Additional Parity Indebtedness") (i) to finance the costs of completing the Project, (ii) to finance the costs of improvements, additions, extensions, replacements, equipment or betterments and of any property, rights or easements deemed by the Authority to be necessary, useful or convenient for the Sewer System, (iii) to refund any of the Series 2011B Bonds or other Parity Indebtedness then outstanding, or (iv) to effect some combination of (i), (ii), and (iii). Any Additional Parity Indebtedness shall be in such form, shall be dated such date, shall mature in such installments of principal and interest, shall bear interest at such rate or rates, shall be in such denomination or denominations and may contain such provisions for prepayment prior to their respective maturities, all as provided by the Authority by resolution adopted prior to their issuance.

12. **Issuance of Additional Parity Indebtedness.** Additional Parity Indebtedness may be issued to complete the Project. Otherwise, Additional Parity Indebtedness may not be issued unless acceptable documentation is provided establishing that Net Revenues for the fiscal year following the year in which such Additional Parity Indebtedness is to be issued will be at least 120 percent of the average annual debt service requirements on all outstanding Parity Indebtedness, including the Additional Parity Indebtedness proposed to be issued. For purposes of this Section 12, Net Revenues means the Revenues less amounts necessary to pay Operating Expenses. This limitation may be waived or modified by the written consent of the holders representing 75 percent of the then outstanding Parity Indebtedness.

13. **Junior or Subordinate Indebtedness.** Bonds, notes or other evidences of indebtedness that are secured on a junior or subordinate basis to the Parity Indebtedness with

respect to the pledge of the Revenues may be issued in such form, shall be dated such date, shall mature in such installments of principal and interest, shall bear interest at such rate or rates, shall be in such denomination or denominations and may contain such provisions for prepayment prior to their respective maturities, all as provided by the Authority by resolution adopted prior to their issuance.

14. **Delivery of Bonds.** The Chairman and Vice Chairman and the Secretary and Assistant Secretary are hereby authorized and directed to take all proper steps to have the Series 2011B Bonds prepared and executed in accordance with their terms and to deliver the Series 2011B Bonds to the Government upon (i) payment of the purchase price thereof or (ii) if the Series 2011B Bonds are delivered in the alternative form providing for principal advances to be made from time to time by the Government, receipt by such officer of the Government's agreement to make such advances.

15. **Mandatory Refinancing of Bonds.** The Authority shall refinance the unpaid principal balance of the Series 2011B Bonds upon the request of the Government if at any time it shall appear to the Government that the Authority is able to refinance the amount of the Series 2011B Bonds then outstanding, in whole or in part, by obtaining a loan for such purposes from responsible cooperative or private credit sources, at reasonable rates and terms for loans for similar purposes and periods of time. The Authority will, upon request of the Government, apply for and accept such loan in sufficient amount to repay the Government and will take all such actions as may be required in connection with such loan.

16. **Further Actions.** The Chairman and Vice Chairman, Secretary and Assistant Secretary, and General Manager and Deputy General Manager of the Authority and such other officers and agents of the Authority as they may designate are authorized and directed to take such further actions as they deem necessary or appropriate regarding the issuance, sale and delivery of the Series 2011B Bonds, including, without limitation, the preparation, execution and delivery of any agreement relative to the Series 2011B Bonds, the proceeds thereof, or the security therefor, or the Project, as contemplated by or required under the Conditions Letter. All such actions previously taken by officers and agents of the Authority in connection with the issuance, sale, and delivery of the Series 2011B Bonds are hereby ratified and confirmed to the extent that they were consistent with this Resolution.

17. **Filing of Resolution.** Counsel to the Authority is authorized and directed to file a certified copy of this Resolution with the Circuit Court of Washington County, Virginia, pursuant to Section 15.2-5126 of the Code of Virginia of 1950, as amended.

18. **Effective Date.** This Resolution shall take effect immediately.

Adopted this 28th day of November, 2011.

Joseph Chase
Chairman, Washington County Service Authority

Robert Cornett
Secretary, Washington County Service Authority

FORM OF SERIES 2011B BOND

The Washington County Service Authority makes no representations or warranties and is providing no legal opinion regarding the status of interest on this Bond, if any, for federal income tax purposes. Interest on this Bond, if any, is expected to be included in gross income for federal income tax purposes.

No. R-1

\$1,677,000

UNITED STATES OF AMERICA
COMMONWEALTH OF VIRGINIA

WASHINGTON COUNTY SERVICE AUTHORITY

Sewer System Revenue Bond, Taxable Series 2011B

Washington County Service Authority, a public body politic and corporate of the Commonwealth of Virginia (the "Authority"), for value received, hereby acknowledges itself indebted and promises to pay to the United States of America, or registered assigns, the principal sum equal to [the aggregate amount of principal advances shown on the attached Certificate of Principal Advances, but not to exceed the sum¹] of

ONE MILLION SIX HUNDRED SEVENTY-SEVEN THOUSAND AND 00/100 DOLLARS
(\$1,677,000)

and to pay to the registered owner hereof interest on the unpaid principal from the date hereof [or the date of each principal advance shown on the attached Certificate of Principal Advances¹] until payment of the entire principal sum at the rate of two and one-quarter percent (2.25%) per year. Interest only on this Bond is due and payable on _____, 201_ and _____, 201_. Installments of combined principal and interest of \$_____ are payable beginning _____, 201_, and continuing on the same day of each month thereafter until the principal of this Bond is paid in full. Any payment on this Bond shall be applied first to interest accrued to such payment date and then to principal. If not sooner paid, the final installment shall be due and payable 40 years from the date hereof. Such installments shall be payable in lawful money of the United States of America and shall be electronically debited from the Authority's account on the day payment is due.

This Bond has been authorized by a resolution duly adopted by the Authority on November 28, 2011 (the "Bond Resolution"), and issued pursuant to the Constitution and statutes of the Commonwealth of Virginia, including the Virginia Water and Waste Authorities Act, Chapter 51, Title 15.2 of the Code of Virginia of 1950, as amended, to provide funds to finance the costs of improvements to the sewer system including the Exit 13 sewer project, together with related expenses, including without limitation the costs of the issuance of this Bond. Reference is hereby made to the Bond Resolution and any amendments thereto for the provisions, among others, describing the pledge and covenants securing this Bond, the nature and extent of the security, the terms and conditions upon which this Bond has been issued, the rights and obligations of the Authority, and the rights of the registered owner of this Bond.

¹ Alternative language to be used if the Government requests provision for principal advances.

The principal of and interest on this Bond are secured by a pledge of the Revenues (as defined in the Bond Resolution) of the Sewer System (as defined in the Bond Resolution) pursuant to the terms of the Bond Resolution. Such pledge is on parity with the pledge of the Revenues of the Sewer System securing the Authority's Existing Parity Indebtedness (as defined in the Bond Resolution) and any Additional Parity Indebtedness (as defined in the Bond Resolution) that may be issued from time to time pursuant to the terms of the Bond Resolution. **NEITHER THE COMMONWEALTH OF VIRGINIA NOR ANY OF ITS POLITICAL SUBDIVISIONS, INCLUDING THE AUTHORITY, SHALL BE OBLIGATED TO PAY THE PRINCIPAL OF OR INTEREST ON THIS BOND OR THE OTHER COSTS INCIDENT TO IT, IF ANY, EXCEPT FROM THE REVENUES AND ANY OTHER MONEY OR PROPERTY PLEDGED FOR SUCH PURPOSE, AND NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE COMMONWEALTH OF VIRGINIA OR ANY OF ITS POLITICAL SUBDIVISIONS, INCLUDING THE AUTHORITY, IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF OR INTEREST ON THIS BOND OR OTHER COSTS INCIDENT TO IT, IF ANY. THE ISSUANCE OF THIS BOND DOES NOT DIRECTLY, INDIRECTLY OR CONTINGENTLY OBLIGATE THE COMMONWEALTH OF VIRGINIA OR ANY OF ITS POLITICAL SUBDIVISIONS, INCLUDING THE AUTHORITY, TO LEVY ANY TAXES FOR THE PAYMENT OF THIS BOND.**

This Bond is fully registered as to both principal and interest in the name of the United States of America. Transfer of this Bond may be registered upon the registration books of the Bond Registrar. Prior to due presentment for registration of transfer, the Bond Registrar shall treat the registered owner as the person exclusively entitled to payment of principal and interest and the exercise of all other rights and powers of the owner.

Installments of the principal due on this Bond may be prepaid at the option of the Authority at any time as a whole or in part from time to time (but if in part, in inverse order of their maturities), without premium. Prepayments of installments of principal shall not affect the obligation of the Authority to pay the remaining installments payable as provided above.

All acts, conditions and things required by the Constitution and statutes of the Commonwealth of Virginia to happen, exist or be performed precedent to and in the issuance of this Bond have happened, exist and have been performed, and this Bond, together with all other indebtedness of the Authority, is within every debt and other limit prescribed by the Constitution and statutes of the Commonwealth of Virginia.

[REMAINDER OF PAGE LEFT BLANK; SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Washington County Service Authority has caused this Bond to be signed by the Chairman and the Authority's seal to be affixed and attested by the signature of the Secretary.

[SEAL]

**WASHINGTON COUNTY SERVICE
AUTHORITY**

By: _____
Joseph Chase, Chairman

ATTEST:

Robert Cornett, Secretary

[SIGNATURE PAGE TO WASHINGTON COUNTY SERVICE AUTHORITY
SEWER SYSTEM REVENUE BOND, TAXABLE SERIES 2011B]

TRANSFER OF BOND

The transfer of this Bond may be registered by the registered owner or its duly authorized attorney upon presentation hereof to the Bond Registrar who shall make note of such transfer in books kept by the Bond Registrar for that purpose and in the registration blank below:

Date of Registration

Name of Registered Owner

Signature of Bond Registrar

CERTIFICATE OF PRINCIPAL ADVANCES²

The amount and date of principal advances not to exceed the face amount hereof shall be entered hereon by an authorized officer of the United States of America, when the proceeds of each such principal advance are delivered to the Authority.

<u>Amount</u>	<u>Date</u>	<u>Authorized Signature</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

² Certificate of Principal Advances to be used if the Government requests provision for principal advances.

**AGREEMENT BETWEEN THE
WASHINGTON COUNTY SERVICE AUTHORITY (WCSA)
AND
THE LANE GROUP INCORPORATED (ENGINEER)
FOR
PROFESSIONAL ENGINEERING SERVICES
MEADOWVIEW/EMORY/GLADE SPRING SEWER CONVEYANCE AND
TREATMENT STUDY**

THIS IS AN AGREEMENT made as of November 28, 2011, between the Washington County Service Authority, with principal offices at 25122 Regal Drive, Abingdon, Virginia 24211-7444, hereinafter referred to as "WCSA" and The Lane Group, Incorporated with offices at 124 Depot Avenue, P.O. Box 1340, Chilhowie, Virginia 24319, hereinafter referred to as "ENGINEER".

The WCSA has resolved to evaluate the capacity of the conveyance system and wastewater treatment plant in eastern Washington County. This study will review the gravity sewer and pumping systems upstream of the Hall Creek Wastewater Treatment Facility (HCWTF) with particular focus on the conveyance system from the Southwest Virginia Regional Jail SVRJ to the HCWTF. The HCWTF will be reviewed for both operational and capacity improvements necessary to meet current and future conditions. Expansion of the treatment system will also be studied for prospective industrial capacity. Additionally the WCSA desires to study the most feasible and desirable expansion of the service area to serve existing residential/commercial/industrial customers. The expanded service areas include

- **Lee Highway from Watauga Road eastward to Stonybrook or Ravenwood**
- **Mature subdivisions with noted septic system failures as identified by the Virginia Department of Health**

Additionally, because WCSA's collective Washington County sewer systems appear to be set to grow by more than 700 connections, one wastewater treatment facility, one major wastewater pumping station and several miles of aging sewer line within the next 24 months, WCSA wishes the ENGINEER to evaluate whether or not it is appropriate for WCSA to acquire specialty equipment such as the following:

- **Jet / Vacuum Truck**
- **Camera Truck**
- **Portable Flow Monitoring Equipment**

The study's findings will be assembled in a Preliminary Engineering Report prepared in accordance with applicable funding and regulatory agency standards. The Study and Preliminary Engineering Report is hereinafter referred to as "PROJECT".

WCSA has selected ENGINEER in accordance with the requirements of the Virginia Public Procurement Act to provide engineering services in connection with the "PROJECT".

It is understood that if the aforementioned procurement allows, and if desired, the WCSA to direct the ENGINEER to perform additional design, funding, advertisement, procurement and construction phase services and the ENGINEER desires to provide such services.

WCSA and ENGINEER, in consideration of their mutual covenants, herein agree in respect of the performance of professional services by ENGINEER and the payment for those services by WCSA as set forth below.

PART 1.0- SCOPE OF SERVICES

ENGINEER shall provide the following Scope of Services for development of a Preliminary Engineering Report for the Meadowview/Emory/Glade Spring Sewer Conveyance and Treatment System.

1.1 — Project Initiation Meeting

ENGINEER will schedule and attend one (1) Project initiation meeting with WCSA in Abingdon, Virginia. This initial meeting would be attended by representatives from the WCSA and ENGINEER. The purpose of the meeting is to:

- Review the scope and schedule for the project;
- Establish lines of communication;
- Discuss protocols for contact and communication with the Virginia Department of Environmental Quality (VDEQ) representatives;
- Set future meeting dates;
- Exchange information and ideas; and
- Obtain background information and data necessary to complete the project (i.e. plans, reports, testing results).

Following the meeting ENGINEER shall summarize the information collected and exchanged during the meeting, and identify follow-up or action items in a meeting summary that would be distributed to all participants. A separate list of identified knowledge gaps (i.e. analytical testing), if any, that must be filled to allow the continued development of the PROJECT will be provided.

1.2 — Review and Summarize Existing Conditions

The WCSA have had sanitary sewer overflows at a downstream pump station that serves the SVRJ. The WCSA has determined that these overflows were caused by excessive flows/use at the SVRJ. Under the existing conditions section, ENGINEER will review the water use records as well as meet with maintenance staff at the SVRJ to determine water use and the resulting sewer discharge flows.

Collection system capacity will be established by examining record drawings of the main portions of the collection system. The minimum slope for each section of the system will be established, and the gravity capacity of the sewer determined based up upon this slope.

At the Authority's option, a hydraulic model of the collection system, including all pipes above 8-inches in diameter, as well as all major 8-inch trunk mains on the system. The model development will include an update of the Authority's GIS data with all modeled pipe and manhole inverts, based on the provided record drawings. The model will provide a more in-depth look at the capacity of the system, with the ability to examine how much flow each portion of the system can handle under surcharged peak flow conditions. The findings of the model will be utilized to document existing conditions, evaluate alternatives and identify potential problem areas, if this option is accepted by the Authority. ENGINEER will build this sanitary sewer model based upon record drawings and GIS information provided by the WCSA. ENGINEER has assumed that this data (manhole rims, inverts, pipe diameters, and lengths) is available electronically and no field work or survey is required for this task.

Pump station capacity will be established by pump drawdown testing performed by the WCSA. This will be compared to water use data from the SVRJ as well as pump run time records and treatment plant influent flows. If additional flow data is required, ENGINEER shall identify the needs as part of the data collection plan detailed later in this Scope of Services. ENGINEER will visit the HCWTF and meet with the staff to review the existing facility. Based upon site visit, information provided by staff, and review of record drawings/specifications, ENGINEER will identify any deficiencies that affect the capacity and/or operation of the facility. ENGINEER will evaluate the facility in accordance with the Virginia Department of Environmental Quality's Sewage Collection and Treatment Regulations and identify any deficiencies. ENGINEER will review two years of influent and effluent wastewater data and comment on the facility's performance. Any design conditions will be based upon current data unless information on future use is known.

ENGINEER's review of permit and regulatory requirements will include a summary of the existing discharge permit and the facility's compliance history. ENGINEER will also identify any proposed regulations that might affect the facility in the future.

At the conclusion of this task, ENGINEER will summarize the findings in technical memorandum format. The ENGINEER will submit five (5) copies an existing conditions summary in the form of two written Technical Memorandums (TM No. 1 – Introduction & Background and TM No. 2 – Existing Conditions) for WCSA's review and approval.

1.3 — Data Collection Plan

The WCSA has a great deal of data with respect to the operation and maintenance of the existing SYSTEM; however, some gaps in the available data may become clear as the existing conditions are evaluated. Under this Task, ENGINEER will prepare a plan to collect data needed to fill existing knowledge gaps, WCSA will be responsible to review and approve the Data Collection Plan and provide this additional data to the ENGINEER or authorize the ENGINEER to gather/obtain the needed data.

1.4 — Needs Assessment

For the Preliminary Engineering Report to satisfy its intended function it must include a clear definition of PROJECT needs. Examples of these other project needs could be:

- Repair or replacement of equipment that is operating inefficiently;
- Reducing maintenance time for both the treatment plant and collection/conveyance system;
- Reducing attendance requirements;
- Improving safety;
- Aesthetic treatments to improve the comfort and efficiency of the staff's working environment and inspire public confidence in the capabilities of the treatment facility and collection/conveyance system;
- Evaluation of the structural, mechanical, and electrical components of the existing conveyance and treatment facilities;
- Anticipation of changes in required treatment levels by Federal or State Regulatory agencies in the near future and planning for these changes while providing flexibility in design for future improvements.
- To identify the "current" and "available" capacity within the conveyance system and any needed improvements to said conveyance system as a result of any known or planned system expansions or new connections.

Within 45 days following the execution of this Agreement, WCSA shall provide ENGINEER with a comprehensive listing of WCSA's known needs and ENGINEER will supplement this list with ENGINEER's own observations and recommendations following ENGINEER's review of the existing facilities. ENGINEER will then formalize and return this list to the WCSA in the form of a Technical Memorandum (TM No. 3) for review and approval by WCSA. Five (5) copies of TM No. 3 shall be provided.

1.5 — Develop and Report Design (Future) Conditions

Under this task, ENGINEER shall develop any projected SYSTEM expansions (both collection extensions and treatment plant capacity expansions) needed as a result of increased wastewater flows. Input from the WCSA and Industrial Development Association (IDA) along with various population growth projections will be utilized to determine the need and feasibility for expansion. We will meet with the WCSA and IDA to determine the required industrial allocation and possible locations for its entry into the wastewater system. Also service area expansions and projected wastewater flows resulting from these expansions will be considered. The only area in consideration currently is the portion of Lee Highway from Watauga Road eastward to Ravenwood, including one industry on Watauga Road. To determine other potential expansions, the Virginia Department of Health will be contacted to define any areas of septic tank drain-field system failures indicating the need for SYSTEM expansion. In addition, discussion with the WCSA will be conducted to ensure all potential expansions are considered.

This task will also project future limits for the treatment plant that must be met due to additional treatment plant flows and/or more stringent effluent standards. Any regulations that will affect solids treatment and disposal will also be identified.

ENGINEER will meet with the WCSA to discuss the future conditions prior to developing and evaluating alternatives. Flow projections and methodologies will be presented at the meeting. After the meeting and input from the WCSA, the ENGINEER will subsequently submit the results of the work and collaboration completed under this task in the form of a written Technical Memorandum (TM No. 4 – Future Conditions) for review and approval by the WCSA. Five (5) copies of the TM No. 4 will be provided.

1.6 — Alternative Identification and Evaluation

Once the future conditions for the PROJECT have been identified, ENGINEER shall identify, screen, evaluate, and develop alternatives for the conveyance system including service area expansions identified in previous technical memorandums. ENGINEER will utilize sewer system capacity numbers developed as part Technical Memorandum No. 2 to test conveyance system alternatives that are required to meet the future conditions. If a hydraulic model is developed, the model will be utilized to examine the future conditions and potential upgrades. As part of this, ENGINEER will determine if the SVRJ peak flows can be conveyed to the treatment plant based upon the future flows and the sewer capacity established in the existing conditions. Additionally ENGINEER will identify, screen, evaluate, and develop alternatives for meeting the future conditions at the treatment plant. Preliminary estimates of capital cost and operation/maintenance cost for each conveyance and treatment alternative will be developed for comparison purposes. Both economic factors and noneconomic factors of each conveyance and treatment alternative will be considered and included in the evaluation. All reasonable alternatives for the conveyance and treatment system will be considered. ENGINEER's work under this Task will include an initial one-day "Brainstorming Session" with WCSA's representatives. The goal of the initial brainstorming session will be to develop a shortlist of alternatives for detailed evaluation.

The brainstorming session will be facilitated by ENGINEER with the intent of maximizing WCSA's participation and input into the selection process. An on-site rating and ranking analysis that considers a range of technical and financial factors will be used to limit the list of alternatives. The rating and ranking will be based upon factors agreed to by WCSA and the results of the rating and ranking process for all alternatives identified will be provided to WCSA.

At the conclusion of the alternatives evaluation, ENGINEER will prepare and submit TM No. 5 (Alternative Identification and Evaluation) to WCSA for review and approval. The submittal will be in the form of a written memorandum with a preliminary process flow diagram for each of the feasible alternatives identified. Five (5) copies of TM No. 5 will be furnished for review and comment by the WCSA. WCSA comments will be incorporated into the final technical memorandum.

1.7 — Alternative Review Meeting

Within two (2) weeks following the submission of TM No. 5, ENGINEER shall schedule and conduct a meeting with WCSA's representatives in Abingdon, Virginia to review and discuss the alternative evaluation. Following this meeting ENGINEER will review and revise TM No. 5 as required based upon

comments received. Five (5) copies of the revised TM No. 5 will be submitted to WCSA for final review and approval.

1.8 — Implementation Plan and Requirements

Once the recommended alternative has been accepted by WCSA, ENGINEER shall prepare a written implementation plan (TM No. 6) that includes a detailed description of the requirements for implementation of the selected conveyance and treatment alternatives. This will include but not be limited to:

- Detailed requirements for special site surveys or investigations, if any;
- Regulatory and permitting issues;
- A plan for capitalization of the project based upon WCSA's access to capital and available financing alternatives;
- A detailed schedule for implementation of the project, including the roles and responsibilities of the various parties that will be required to complete the project;
- Operating cost projections for the first and subsequent years of operation; and
- An analysis of sewer rates needed to support the project

At the conclusion of the Implementation Plan development, ENGINEER will prepare and submit TM No. 6 (Implementation Plan) to the WCSA for review and approval. The submittal will be in the form of a written memorandum. Five (5) copies of TM No. 6 will be furnished for review and comment by the WCSA. WCSA comments will be incorporated into the final technical memorandum.

1.9 — Draft Report

At the conclusion of completing the all six technical memorandums and incorporating the WCSA's comments, ENGINEER will incorporate the approved technical memorandums into a PER. This report will consist of Technical Memorandums No. 1-6 as applicable (each having been previously reviewed by WCSA's staff) incorporated into a single professionally prepared design report in full satisfaction of VDEQ and Rural Development requirements.

1.10 — Final Progress Meeting

ENGINEER shall schedule and attend one final meeting in Abingdon, Virginia to present the final PER and receive comments from the WCSA's representatives. Here, WCSA's staff will be given a final opportunity to offer comments and input on the report. Given the previous opportunities for review, minimal comments would be expected at this stage. However, if required, ENGINEER shall amend or otherwise modify the report to secure WCSA's approval.

1.11 — Final Report

Within two weeks following the meeting under 1.10 above, ENGINEER shall furnish WCSA with ten (10) signed and stamped copies of the final PER addressing all comments received. An electronic PDF of the final PER will also be submitted.

1.12 — VPDES Permit Reissuance Application for Hall Creek WWTP

Virginia Pollutant Discharge Elimination System (VPDES) Permit No. VA0087378 issued to the Washington County Service Authority (WCSA) for discharges from the Hall Creek Wastewater Treatment Plant (WWTP) will expire on May 6, 2012. In accordance with Virginia regulations and VPDES permit requirements, an application for reissuance of the permit must be completed and submitted to the Virginia Department of Environmental Quality (VDEQ) by November 7, 2011. The application includes the EPA Form 2A, the VPDES Sewage Sludge Application Form, and the VPDES Permit Application Addendum.

The Hall Creek Wastewater Treatment Plant currently discharges wastewater to Hall Creek, a tributary to the Middle Fork Holston River. Wastewater sludge is currently dewatered at the WWTP and conveyed by truck to a municipal solid waste landfill for disposal.

The current permit provides for a discharge of up to 0.63 MGD. In light of the potential for continued residential growth in the service area as well as to support continued commercial and industrial development, the WCSA is considering the expansion of the WWTP to treat increased volumes of wastewater. As such, the VPDES permit reissuance application may include a request for tiered discharge limits to support the current 0.63 MGD facility as well as an expanded facility. The volume for the additional tier will be determined as part of a facility evaluation planned for the summer of 2011.

Alternatively, WCSA maintains a discharge permit at a discontinued wastewater treatment facility located near Exit 22 of Interstate 81 adjacent to 14128 Stonybrook Road. As part of the study the ENGINEER will evaluate the desirability and feasibility of the reactivation and potential expansion of this facility in lieu of expanding the HCWTF.

A summary of the tasks proposed for the preparation of the VPDES permit reissuance application and the associated costs are described herein.

1.12.1 – Task 1 - Site Meeting and Data Acquisition

Site Meeting and Facility Inspection: Prior to preparing the VPDES permit application, a site meeting and facility inspection of the Hall Creek WWTP will be performed to obtain site and treatment facility information. At this time, the receiving stream and areas immediately downstream will be inspected to support subsequent evaluations of DEQ modeling efforts.

Data Acquisition: Existing wastewater treatment process monitoring data, operational data and supporting documents will be provided by the WCSA for use in preparing the application documents. These include:

1. Discharge Monitoring Reports for the last 3 years;
2. Effluent monitoring data for monitoring performed over the last 3 years; and
3. Copies of the previous VPDES permit application documents and the fact sheet for the last VPDES permit;

This information will be used to prepare the application documents. In addition, the previous application documents will be reviewed to identify any issues of concern and to provide for consistency in application preparation.

1.12.2 – Task 2 - Effluent Monitoring

The VPDES permit reissuance application requires effluent monitoring data to be used to evaluate the need for permit limits. This includes conventional and nonconventional pollutants. WCSA will be responsible for the collection, analyses, and costs of the effluent monitoring based on a mutually agreed upon sampling schedule. This includes the collection and analysis of three effluent samples collected over a four-month period. The parameters include those referenced in Part A.12 and Part B.6.

1.12.3 – Task 3 - Application Preparation

The proposed WWTP operations and discharge information will be used in conjunction with the information obtained from the site and watershed inspections and the pre-application meeting to prepare the VPDES permit application. This application will reflect the continued discharge to Hall Creek, continued disposal of sewage sludge at a municipal solid waste landfill, and a future expanded flow tier in addition to the current 0.63 MGD flow tier. This information will be used to prepare the following forms and documents, which together constitute the application:

1. EPA Form 2A;
2. DEQ Permit Application Addendum; and
3. DEQ Sewage Sludge Application; Public Notice Authorization.

The completed application forms will be provided in draft form to the Washington County Service Authority for review and comment. Upon completion of review, final copies of the application forms will be prepared for signature by the Authority. The original application will be submitted to the DEQ on behalf of the Authority; printed and pdf copies of the application will be provided to the Authority.

The Authority will be responsible for the payment of public notification advertisements and the costs of any permit application and/or annual permit fees.

1.12.4 – Task 4 - Draft Permit Review and Comments

The draft permit and associated fact sheet prepared by the DEQ for the proposed WWTP will be reviewed for accuracy and consistency with current regulations and other permits for similar facilities. Written comments will be prepared and submitted to DEQ as needed for any questionable permit requirements or other items of concern.

1.12.5 – Task 5 - Additional Services

It is possible that activities and services beyond those described in Tasks 1-4 may be desired or required to support the acquisition of reasonable discharge limits for an expanded discharge to

Hall Creek. The scope and costs for additional services beyond those described herein may include, but not be limited to:

1. Meetings with the Authority, DEQ, or other municipal or regulatory agencies;
2. The performance of site-specific studies or modeling;
3. Revision of a Total Maximum Daily Load (TMDL), site-specific pollutant allocation or standard;
4. Preparation for and participation in public meeting(s);
5. Preparation of any other permit applications, including those needed for WWTP construction support, stream crossings, or outfall construction; and,
6. Other items not specifically addressed herein.

The costs for these and any additional services not included in the scope of services described herein will be provided prior to initiation.

1.13 — Additional Tasks

The following additional tasks are not part of the proposed scope of work, but may be added after completion of the PER. Costs for these additional tasks will be determined at the time the work is requested. These additional tasks will not be initiated until the WCSA has given the ENGINEER written authorization.

1.13.1 – Environmental Assessment

If required for funding and requested by the WCSA, under this task, ENGINEER will prepare a PROJECT Environmental Assessment for the recommended alternative in conformance with funding agency requirements. The specific scope will include:

- Identifying project impacts
- Soliciting required agency comments
- Addressing environmental issues and concerns
- Development of necessary mitigation measures
- Completion of an Environmental Assessment Report

ENGINEER will submit the results of our efforts under this task in the form of a stand alone document for review and approval by the WCSA. Should wetlands, endangered species, archaeological resources or other items require the performance of special studies or evaluations, ENGINEER will provide a scope of services and cost breakdown for consideration by the WCSA. Similarly, the costs for preparation for and participation in any public hearings or agency meetings will be prepared for consideration by the WCSA. The WCSA will be responsible for the costs of any public notice advertisements and related fees. Five (5) copies of the Environmental Assessment will be provided. The Environmental Assessment will be prepared in accordance with Rural Development guidelines.

1.13.2 – Funding Assistance

Under this task ENGINEER shall assist the WCSA in identifying and securing suitable financing for the project. ENGINEER's work under this task will be billed on an hourly basis for work performed with reimbursement of expenses. Examples of services might include:

- Attendance at meetings with Funding Agencies
- Preparation of Financial Analysis Spreadsheets
- Alternative Rate Evaluations and Reviews
- Preparation of Applications to Funding Agencies
- Meeting with local Congressional representatives

1.13.3- Assistance in Obtaining Data

Under this Task, and if requested by WCSA, the Engineer will assist in collecting data defined in the needs assessment to fill any data gaps that are defined.

PART 2.0- SCHEDULE

The ENGINEER will complete the Work described in Part 1.0 Scope of Services, Paragraph 1.1-1.11 in accordance with the following schedule: (Calendar Days are counted from the date that the Notice to Proceed is issued by the WCSA)

TM No. 1 Introduction and Background & TM No. 2 Existing Conditions	75 days
TM No. 3 Needs Assessment	90 days
TM No. 4 Future Conditions	120 days
TM No. 5 Alternative Identification and Evaluation	150 days
TM No. 6 Implementation Plan	180 days

Part 3.0 PAYMENTS TO ENGINEER

ENGINEER agrees to provide engineering and consulting services for the tasks listed under **Part 1.0 – Scope of Services** for compensation Not-To-Exceed (NTE) the amounts shown in the following schedule: Billings for personnel time shall be in accordance with the Attached Standard Billing Rates (Attachment A)


Compensation Schedule	
Description of Services	Amount
Tasks 1.1-1.11 (TM No. 1-6)	\$65,000
Task 1.12 (VPDES Permit Reissuance)	\$8,500
Cost Adder for Hydraulic Sanitary Sewer Model Development as noted in Task 1.2	\$12,000
Reimbursable Expenses	Included Above
TASK ORDER TOTAL	\$85,500


Part 4.0 SIGNATORY

This AGREEMENT is executed this 29TH day of November, 2011.

WASHINGTON COUNTY
SERVICE AUTHORITY

LANE ENGINEERING,
INCORPORATED

By: 
Name: Robbie Cornett
Title: General Manager
Address: 25122 Regal Drive
Abingdon, VA 24211-7444

By: 
Name: Bobby R. Lane, P.E.
Title: President
Address: 124 Depot Avenue
P.O. Box 1340
Chilhowie, VA 24319

Standard Hourly Rates Schedule-Attachment A

A. Standard Hourly Rates

1. Standard Hourly Rates are set forth in this Appendix 2 to this Exhibit C and include salaries and wages paid to personnel in each billing class plus the cost of customary and statutory benefits, general and administrative overhead, non-project operating costs, and operating margin or profit.
2. The Standard Hourly Rates will be adjusted annually (as of January 1, 2011) to reflect equitable changes in the compensation payable to Engineer.
3. The Standard Hourly Rates apply only as specified in Article C.2.

B. Schedule

Hourly rates for services performed on or after the date of Agreement are:

		Lane	Olver
Billing Class 9	Principal/Senior Engineer	\$120.00/hour	\$150.00/hour
Billing Class 8	Project Engineer/Architect/Manager II	\$ 100.00/hour	\$115.00/hour
Billing Class 7	Project Engineer/Architect/Manager I	\$ 80.00/hour	\$105.00/hour
Billing Class 6	Project Engineer/Architect II	\$ 70.00/hour	\$95.00/hour
Billing Class 5	Project Engineer/Architect I	\$ 60.00/hour	\$85.00/hour
Billing Class 4	Architect Designer/CADD Technician	\$ 55.00/hour	\$75.00/hour
Billing Class 3	Construction Observer II/Professional II	\$ 60.00/hour	\$65.00/hour
Billing Class 2	Construction Observer I/Technician II	\$ 50.00/hour	\$55.00/hour
Billing Class 1	Administrative Support	\$ 35.00/hour	\$45.00/hour
Sub-consultants		Cost plus 15%	

(Appendix 2 to Exhibit C – Reimbursable Expenses Schedule)

SUGGESTED FORMAT
(for use with E-510, 2002 Edition)

This is **EXHIBIT J**, consisting of 1 pages, referred to in and part of the
Agreement between Owner and Engineer for Professional Services
dated November 28, 2011.

**AMENDMENT NO.1 TO OWNER-ENGINEER AGREEMENT
WHITES MILL ROAD WATER IMPROVEMENTS PROJECT**

1. Background Data

- a. Effective Date of Owner-Engineer Agreement: April 26, 2010
- b. Owner: Washington County Service Authority
- c. Engineer: Adams-Heath Engineering, Inc.
- d. Project: Whites Mill Road Water Improvements Project

2. Nature of Amendment *[Check those that are applicable and delete those that are inapplicable.]*

- ☒ Additional Services to be performed by Engineer
- ☒ Modifications to Payment to Engineer
- ☐ Modifications to Time(s) for rendering Services

3. Description of Modifications

Attachment 1, "Modifications"

Attachment 2, "Adams-Heath Engineering, Inc. Standard Billing Rates"

Owner and Engineer hereby agree to modify the above-referenced Agreement as set forth in this Amendment. All provisions of the Agreement not modified by this or previous Amendments remain in effect. The Effective Date of this Amendment is November 28, 2011.

OWNER:

Washington County Service Authority

By: (Signature) Robbie Cornett

Typed Name: Robbie Cornett

Title: General Manager

Date Signed: 04 DEC 2011

ENGINEER:

Adams-Heath Engineering, Inc.

By: (Signature) Kevin Heath

Typed Name: Kevin Heath, P.E.

Title: President

Date Signed: 11/28/11

AGENCY CONCURRENCE

Agency: USDA-Rural Development

By (Signature): _____

Typed Name: Eddie Smith, P.E.

Title: State Engineer

Date: _____

Modifications

[Include the following paragraphs that are appropriate and delete those not applicable to this amendment. Refer to paragraph numbers used in the Agreement or a previous amendment for clarity with respect to the modifications to be made. Use paragraph numbers in this document for ease of reference herein and in future correspondence or amendments.]

1. Engineer shall perform the following Additional Services:

Amend the Engineering Services Agreement for the Whites Mill Road Water Improvements Project to extend the period for providing Resident Inspection Services.

The original Engineering Services Agreement included a cost allowance of \$70,200 for Resident Project Representation (RPR) Services for the construction project based upon thirty-nine (39) 40-hour weeks at the Standard Billing Rate of \$45.00/ hour. The original construction contract for the Project included a timeframe of 240 calendar days from Notice to Proceed to Substantial Completion. Notice to Proceed was issued for January 10, 2011 with a projected Substantial Completion date of September 7, 2011.

Construction has not yet been completed. Based upon the Contractor's current progress, it is estimated that an approximate additional Resident Project Representation (RPR) Services time of 18 weeks +/- over the current budgeted amount will be required to complete the project.

The originally allocated Resident Project Representation (RPR) Fees have been expended. Therefore, the OWNER requests that the ENGINEER continue to provide Residential Project Representation Services as necessary until Final Completion of construction.

2. For the Additional Services or the modifications to services set forth above, Owner shall pay Engineer the following additional or modified compensation:

Resident Project Representation Services- Hourly Not to Exceed – Following is an estimate of the required time for RPR services time through construction completion.
Billing for RPR services shall be hourly based upon the actual RPR time required.

18 weeks @ 40 hr/wk @ \$45.00/hr until Final Completion	<u>32,400.00</u>
Total Fee Increase for extended Resident Project Representation Services	<u>\$32,400.00</u>

Resident Project Representation (RPR) will be billed hourly only for the number of hours utilized. In the event that construction finishes sooner than the anticipated 18 weeks, any unused hours will not be billed.

CERTIFICATE OF SECRETARY

The undersigned Secretary of the Washington County Service Authority (the "Authority"), hereby certifies that:

1. A regular meeting of the Board of the Authority (the "Board") was duly called and held on November 28, 2011 (the "Meeting"), at which the following Board members were present and absent:

PRESENT: Mr. Joseph Chase
Mr. Donald L. Stout
Mr. Prince Coleman
Mr. Frank Stephon
Mr. Dwain Miller
Mr. Kenneth Taylor

ABSENT:

Mr. Wanson D. Hutchinson

2. A resolution (the "Resolution") of the Authority entitled "RESOLUTION AUTHORIZING AND APPROVING THE ISSUANCE, AWARD, AND SALE OF NOT TO EXCEED \$1,677,000 SEWER SYSTEM REVENUE BONDS, TAXABLE SERIES 2011B, AND SETTING FORTH THE FORM, DETAILS, AND PROVISIONS FOR THE PAYMENT THEREOF" was duly adopted at the Meeting by the recorded affirmative vote of at least a majority of all of the members of the Board of the Authority, the ayes and nays being recorded in the minutes of the meeting as shown below:

MEMBER


Mr. Joseph Chase
Mr. Donald L. Stout
Mr. Prince Coleman
Mr. Frank Stephon
Mr. Dwain Miller
Mr. Kenneth Taylor

VOTE

Aye
Aye
Aye
Aye
Aye
Aye

3. Attached is a true and correct copy of the Resolution.

WITNESS my signature and the seal of the Washington County Service Authority this 28th day of November, 2011.



Robert Cornett
Secretary, Washington County Service Authority

[SEAL]

WASHINGTON COUNTY SERVICE AUTHORITY

**RESOLUTION AUTHORIZING AND APPROVING THE
ISSUANCE, AWARD, AND SALE OF NOT TO EXCEED \$1,677,000
SEWER SYSTEM REVENUE BONDS, TAXABLE SERIES 2011B,
AND SETTING FORTH THE FORM, DETAILS, AND
PROVISIONS FOR THE PAYMENT THEREOF**

A. The Washington County Service Authority (the "Authority") is a public body politic and corporate of the Commonwealth of Virginia (the "Commonwealth") created pursuant to the Virginia Water and Waste Authorities Act, Chapter 51, Title 15.2 of the Code of Virginia of 1950, as amended (the "Act").

B. The Authority has determined that it is necessary and desirable to issue its Sewer System Revenue Bonds, Taxable Series 2011B, in an aggregate principal amount not to exceed \$1,677,000 (the "Series 2011B Bonds"), and to use the proceeds thereof, along with other available funds, if any, and the proceeds of the Authority's Sewer System Revenue Bonds, Taxable Series 2011A (the "Series 2011A Bonds") to be issued contemporaneously with the Series 2011B Bonds, to finance the costs of improvements to the sewer system including the Exit 13 sewer project, together with related expenses, including without limitation the costs of the issuance of the Series 2011B Bonds (the "Project").

C. The Series 2011A Bonds and the Series 2011B Bonds will each be sold by the Authority to the United States of America, acting by and through the United States Department of Agriculture, Rural Development (the "Government"), under the terms of a letter of conditions from the Government to the Authority dated May 28, 2009, as amended by a letter from the Government to the Authority dated November 8, 2011 (as amended, the "Conditions Letter").

D. The Conditions Letter has been presented at this meeting and filed with the Authority's records.

E. In accordance with the terms of the Conditions Letter and the terms set forth in this Resolution, the Series 2011B Bonds will be secured by a pledge of the Revenues (as defined below) on parity with the Authority's outstanding Sewer System Revenue Refunding Bond, Series 2008 (the "2008 Bond" and the "Existing Parity Indebtedness"), the Series 2011A Bonds and Additional Parity Indebtedness (as defined below).

NOW, THEREFORE, after consideration and in furtherance of the public purposes for which the Authority was created, be it resolved that:

1. **Authorization of Bonds and Use of Proceeds.** The Authority hereby finds and determines that it is advisable and in the best interest of the Authority to contract a debt and to issue the Series 2011B Bonds in an aggregate principal amount not to exceed \$1,677,000 to be designated the "Washington County Service Authority, Sewer System Revenue Bonds, Taxable Series 2011B" or such other designation as may be approved by the Chairman or Vice Chairman

of the Authority. The proceeds from the issuance and sale of the Series 2011B Bonds shall be used, together with other available funds, if any, to pay the costs of the Project.

2. **Sale of Bonds and Acceptance of Conditions Letter.** After mature consideration of the possible methods of sale of the Series 2011B Bonds and current conditions of the municipal bond market, the Authority hereby finds and determines that it will benefit the customers of the Authority through the promotion of their safety, health, welfare, convenience or prosperity for the Authority to contract a debt and to issue and sell the Series 2011B Bonds to the Government and that it is in the best interest of the Authority to accept the offer of the Government to purchase the Series 2011B Bonds upon the terms set forth in the Conditions Letter. Such offer is hereby accepted, and the Authority hereby agrees to meet such terms.

3. **Details of Bonds.** The Series 2011B Bonds shall be in such denominations as requested by the Government. The series designation of the Series 2011B Bonds may be altered by the Chairman or Vice Chairman to reflect the year and sequence in which the Series 2011B Bonds are issued or the requirements of the Government. The Series 2011B Bonds shall bear interest at the rate of the lower of (i) 2.25% per year, or (ii) the rate quoted by the Government as the interest rate effective on the Closing Date (as defined below). The execution and delivery of the Series 2011B Bonds on the Authority's behalf shall conclusively evidence the interest rate stated in the Series 2011B Bonds as having been approved and authorized by this Resolution. The Series 2011B Bonds shall be in fully registered form, shall be numbered consecutively beginning with R-1 and shall be dated the date of their delivery to the Government or such other customary date required by the Government (the "Closing Date"). Installments due the first 24 months on the Series 2011B Bonds shall consist of interest only and shall be paid annually on the first and second anniversaries of the Closing Date. Payments for the next 456 months will be equal amortized monthly installments to be paid until the principal of the Series 2011B Bonds is paid in full. If not sooner paid, the final installment on the Series 2011B Bonds shall be due and payable 40 years from the Closing Date. Any payment on the Series 2011B Bonds shall be applied first to interest accrued to the payment date and then to principal. Installments shall be payable in lawful money of the United States of America and shall, in accordance with the Preauthorized Debit (PAD) payment process or such other subsequent payment process specified by the Government, be electronically debited from the Authority's account on each day payment is due.

4. **Form of Bonds.** The Series 2011B Bonds shall be in substantially the form presented at this meeting, with such variations, insertions or deletions as may be approved by the Chairman or Vice Chairman, whose approval shall be evidenced conclusively by his execution and delivery of the Series 2011B Bonds on the Authority's behalf. There may be endorsed on the Series 2011B Bonds such legend or text as may be necessary or appropriate to conform to any applicable rules and regulations of any governmental authority or any usage or requirement of law with respect thereto.

At the request of the Government, the Series 2011B Bonds may be delivered as fully registered Series 2011B Bonds in the alternative form presented at this meeting providing for principal advances to be made from time to time by the Government in an aggregate amount not to exceed \$1,677,000. An authorized officer of the Government shall enter the amount and the

date of each such principal advance on the Certificate of Principal Advances attached to each of the Series 2011B Bonds when the proceeds of such advance are delivered to the Authority. Each such principal advance shall bear interest from the date of such advance so entered on the certificate.

5. **Execution of Bonds.** The Series 2011B Bonds shall be signed by the Chairman or Vice Chairman and the Authority's seal shall be affixed thereto and attested by the Secretary or Assistant Secretary of the Authority.

6. **Registration, Transfer and Exchange.** The Series 2011B Bonds shall be fully registered as to both principal and interest. Transfer of the Series 2011B Bonds may be registered upon books maintained for that purpose at the office of the Bond Registrar. Prior to due presentment for registration of transfer, the Bond Registrar shall treat the registered owner of each Series 2011B Bond as the person exclusively entitled to payment of principal and interest and the exercise of all other rights and powers of the owner. The Treasurer of the Authority is appointed as the initial Bond Registrar. The Authority may appoint a subsequent Bond Registrar and/or one or more paying agents for the Series 2011B Bonds upon giving written notice to the registered owners of the Series 2011B Bonds specifying the name and location of the principal office of any such Bond Registrar or paying agent. The Series 2011B Bonds shall be registered initially in the name of the "United States of America."

7. **Prepayment of Bonds.** Installments of principal due on the Series 2011B Bonds may be prepaid at the option of the Authority at any time as a whole or in part from time to time (but if in part, in inverse order of maturity) without premium. Notwithstanding the above, the Authority may at any time deliver moneys to the Government with instructions that such moneys be credited against future installments due on the Series 2011B Bonds in inverse chronological order. Prepayments shall not affect the obligation of the Authority to pay the remaining installments payable as provided in Section 3 of this Resolution.

8. **Definitions.** Each of the following capitalized terms shall have the meaning given to it below:

(a) "Operating Expenses" means the costs of operating and maintaining the Sewer System determined under generally accepted accounting principles, exclusive of (i) interest on any debt payable from Revenues, (ii) depreciation and other items not requiring the expenditure of cash, (iii) any amounts expended for capital replacements, repairs and maintenance not recurring annually or reserves therefor, and (iv) reserves for administration, operation and maintenance occurring in the normal course of business.

(b) "Parity Indebtedness" means, collectively, (i) the Series 2011B Bonds, (ii) the Existing Parity Indebtedness, and (iii) any Additional Parity Indebtedness described in Section 11 of this Resolution.

(c) "Revenues" means (i) all rates, fees, rentals, charges, income and money properly allocable to the Sewer System under generally accepted accounting principles (provided that the Authority may determine to include any cash or deferred revenues derived from

availability or connection fees, even if all or a part thereof are excluded from current revenues under generally accepted accounting principles) or resulting from the Authority's ownership or operation of the Sewer System, excluding customer and other deposits subject to refund until such deposits have become the Authority's property, (ii) the proceeds of any insurance covering business interruption loss relating to the Sewer System, (iii) interest on any money or securities relating to the Sewer System held by or on behalf of the Authority, and (iv) any other money from other sources pledged by or on behalf of the Authority to the payment of the Series 2011B Bonds.

(d) "Sewer System" means all plants, systems, facilities, equipment or property owned, operated or maintained by the Authority, and used in connection with the collection and treatment of wastewater, as the same may from time to time exist.

9. **Pledge of Revenues and Debt Service Reserve.** Subject to the Authority's right to apply the Revenues to the payment of Operating Expenses, the Revenues are hereby pledged to secure the payment of the principal of and interest on the Series 2011B Bonds. This pledge shall be valid and binding from and after the issuance and delivery of the Series 2011B Bonds. The Revenues, as received by the Authority, shall immediately be subject to the lien of this pledge without any physical delivery of them or further act. The lien of this pledge of the Revenues shall be on a parity with the lien of the pledge securing the Existing Parity Indebtedness, the Series 2011A Bonds and any Additional Parity Indebtedness (as defined Section 11 of this Resolution). The lien of this pledge shall, subject to the right of the Authority to apply Revenues to the payment of Operating Expenses, have priority over all other obligations and liabilities of the Authority, and the lien of this pledge shall be valid and binding against all parties having claims of any kind against the Authority regardless of whether such parties have notice of this pledge.

In addition, the Authority shall establish a debt service reserve (the "Debt Service Reserve") pursuant to the terms of the Conditions Letter, which is hereby pledged solely to secure the payment of the principal of and interest on the Series 2011B Bonds.

10. **Covenants.** It is hereby covenanted and agreed with the registered owners of the Series 2011B Bonds that so long as any of the installments of principal or interest on the Series 2011B Bonds are outstanding and unpaid, the Authority will:

(a) Charge rates, fees and other charges to users of the Sewer System and fix and maintain such rates, fees and other charges at such level as will produce sufficient Revenues in each fiscal year of the Authority to pay (i) the Operating Expenses with respect to the Sewer System for such fiscal year, (ii) the installments of principal and interest on the Series 2011B Bonds and the other Parity Indebtedness, as the same respectively become due during such fiscal year, and (iii) to maintain the minimum requirements with respect to such fiscal year in the reserves to be established and maintained as provided in the Conditions Letter (the "Reserves"), including the Debt Service Reserve;

(b) Apply the Revenues received by the Authority in each fiscal year first to the payment of the Operating Expenses during such fiscal year, then to the payment of the

installments of principal and interest on the Series 2011B Bonds and the other Parity Indebtedness becoming due during such fiscal year, then to restore the balances in the Reserves to their minimum requirements with respect to such year, and then to any other lawful purpose of the Authority;

(c) Segregate and keep segregated from all other Authority funds all Revenues and keep proper records and accounts therefor, separate and apart from all other municipal records and accounts;

(d) Not permit connections to or use of the Sewer System or provide any services of the Sewer System without making a charge therefor;

(e) Use its best efforts to collect all rates, fees and other charges due to it, including, when appropriate, by perfecting liens on premises served by the Sewer System for the amount of all delinquent rates, fees and other charges where such action is permitted by law.

(f) To the full extent permitted by law, discontinue and shut off, or cause to be discontinued and shut off, services and facilities of the Sewer System, and use its best efforts to cause to be shut off sewer service furnished otherwise than through the Sewer System, to customers of the Sewer System who are delinquent beyond any customary grace periods in the payment of rates, fees and other charges due to the Authority.

11. **Additional Parity Indebtedness.** Subject to the provisions of Section 12 of this Resolution, the Authority may issue or incur additional bonds, notes or other evidences of indebtedness secured by a pledge of the Revenues of the Sewer System on a parity with the pledge securing the Series 2011B Bonds as provided in Section 9 of this Resolution ("Additional Parity Indebtedness"), including without limitation, the Series 2011A Bonds (i) to finance the costs of completing the Project, (ii) to finance the costs of improvements, additions, extensions, replacements, equipment or betterments and of any property, rights or easements deemed by the Authority to be necessary, useful or convenient for the Sewer System, (iii) to refund any of the Series 2011B Bonds or other Parity Indebtedness then outstanding, or (iv) to effect some combination of (i), (ii), and (iii). Any Additional Parity Indebtedness shall be in such form, shall be dated such date, shall mature in such installments of principal and interest, shall bear interest at such rate or rates, shall be in such denomination or denominations and may contain such provisions for prepayment prior to their respective maturities, all as provided by the Authority by resolution adopted prior to their issuance.

12. **Issuance of Additional Parity Indebtedness.** Additional Parity Indebtedness may be issued to complete the Project. Otherwise, Additional Parity Indebtedness may not be issued unless acceptable documentation is provided establishing that Net Revenues for the fiscal year following the year in which such Additional Parity Indebtedness is to be issued will be at least 120 percent of the average annual debt service requirements on all outstanding Parity Indebtedness, including the Additional Parity Indebtedness proposed to be issued. For purposes of this Section 12, Net Revenues means the Revenues less amounts necessary to pay Operating Expenses. This limitation may be waived or modified by the written consent of the holders representing 75 percent of the then outstanding Parity Indebtedness.

13. **Junior or Subordinate Indebtedness.** Bonds, notes or other evidences of indebtedness that are secured on a junior or subordinate basis to the Parity Indebtedness with respect to the pledge of the Revenues may be issued in such form, shall be dated such date, shall mature in such installments of principal and interest, shall bear interest at such rate or rates, shall be in such denomination or denominations and may contain such provisions for prepayment prior to their respective maturities, all as provided by the Authority by resolution adopted prior to their issuance.

14. **Delivery of Bonds.** The Chairman and Vice Chairman and the Secretary and Assistant Secretary are hereby authorized and directed to take all proper steps to have the Series 2011B Bonds prepared and executed in accordance with their terms and to deliver the Series 2011B Bonds to the Government upon (i) payment of the purchase price thereof or (ii) if the Series 2011B Bonds are delivered in the alternative form providing for principal advances to be made from time to time by the Government, receipt by such officer of the Government's agreement to make such advances.

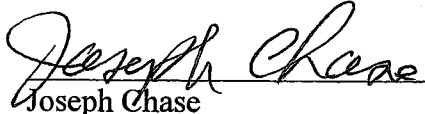
15. **Mandatory Refinancing of Bonds.** The Authority shall refinance the unpaid principal balance of the Series 2011B Bonds upon the request of the Government if at any time it shall appear to the Government that the Authority is able to refinance the amount of the Series 2011B Bonds then outstanding, in whole or in part, by obtaining a loan for such purposes from responsible cooperative or private credit sources, at reasonable rates and terms for loans for similar purposes and periods of time. The Authority will, upon request of the Government, apply for and accept such loan in sufficient amount to repay the Government and will take all such actions as may be required in connection with such loan.

16. **Further Actions.** The Chairman and Vice Chairman, Secretary and Assistant Secretary, and General Manager and Deputy General Manager of the Authority and such other officers and agents of the Authority as they may designate are authorized and directed to take such further actions as they deem necessary or appropriate regarding the issuance, sale and delivery of the Series 2011B Bonds, including, without limitation, the preparation, execution and delivery of any agreement relative to the Series 2011B Bonds, the proceeds thereof, or the security therefor, or the Project, as contemplated by or required under the Conditions Letter. All such actions previously taken by officers and agents of the Authority in connection with the issuance, sale, and delivery of the Series 2011B Bonds are hereby ratified and confirmed to the extent that they were consistent with this Resolution.


17. **Filing of Resolution.** Counsel to the Authority is authorized and directed to file a certified copy of this Resolution with the Circuit Court of Washington County, Virginia, pursuant to Section 15.2-5126 of the Code of Virginia of 1950, as amended.

18. **Effective Date.** This Resolution shall take effect immediately.

Adopted this 28th day of November, 2011.



Joseph Chase
Chairman, Washington County Service Authority



Robert Cornett
Secretary, Washington County Service Authority

FORM OF SERIES 2011B BOND

The Washington County Service Authority makes no representations or warranties and is providing no legal opinion regarding the status of interest on this Bond, if any, for federal income tax purposes. Interest on this Bond, if any, is expected to be included in gross income for federal income tax purposes.

No. R-1

\$1,677,000

UNITED STATES OF AMERICA
COMMONWEALTH OF VIRGINIA

WASHINGTON COUNTY SERVICE AUTHORITY

Sewer System Revenue Bond, Taxable Series 2011B

Washington County Service Authority, a public body politic and corporate of the Commonwealth of Virginia (the "Authority"), for value received, hereby acknowledges itself indebted and promises to pay to the United States of America, or registered assigns, the principal sum equal to [the aggregate amount of principal advances shown on the attached Certificate of Principal Advances, but not to exceed the sum¹] of

ONE MILLION SIX HUNDRED SEVENTY-SEVEN THOUSAND AND 00/100 DOLLARS
(\$1,677,000)

and to pay to the registered owner hereof interest on the unpaid principal from the date hereof [or the date of each principal advance shown on the attached Certificate of Principal Advances¹] until payment of the entire principal sum at the rate of two and one-quarter percent (2.25%) per year. Interest only on this Bond is due and payable on _____, 201_ and _____, 201_. Installments of combined principal and interest of \$_____ are payable beginning _____, 201_, and continuing on the same day of each month thereafter until the principal of this Bond is paid in full. Any payment on this Bond shall be applied first to interest accrued to such payment date and then to principal. If not sooner paid, the final installment shall be due and payable 40 years from the date hereof. Such installments shall be payable in lawful money of the United States of America and shall be electronically debited from the Authority's account on the day payment is due.

This Bond has been authorized by a resolution duly adopted by the Authority on November 28, 2011 (the "Bond Resolution"), and issued pursuant to the Constitution and statutes of the Commonwealth of Virginia, including the Virginia Water and Waste Authorities Act, Chapter 51, Title 15.2 of the Code of Virginia of 1950, as amended, to provide funds to finance a portion of the costs of improvements to the sewer system including the Exit 13 sewer project, together with related expenses, including without limitation the costs of the issuance of this Bond. Reference is hereby made to the Bond Resolution and any amendments thereto for the provisions, among others, describing the pledge and covenants securing this Bond, the nature and extent of the security, the terms and conditions upon which this Bond has been issued, the rights and obligations of the Authority, and the rights of the registered owner of this Bond.

¹ Alternative language to be used if the Government requests provision for principal advances.

The principal of and interest on this Bond are secured by a pledge of the Revenues (as defined in the Bond Resolution) of the Sewer System (as defined in the Bond Resolution) pursuant to the terms of the Bond Resolution. Such pledge is on parity with the pledge of the Revenues of the Sewer System securing the Authority's Existing Parity Indebtedness, the Series 2011A Bonds and any Additional Parity Indebtedness (as each term is defined in the Bond Resolution) that may be issued from time to time pursuant to the terms of the Bond Resolution. **NEITHER THE COMMONWEALTH OF VIRGINIA NOR ANY OF ITS POLITICAL SUBDIVISIONS, INCLUDING THE AUTHORITY, SHALL BE OBLIGATED TO PAY THE PRINCIPAL OF OR INTEREST ON THIS BOND OR THE OTHER COSTS INCIDENT TO IT, IF ANY, EXCEPT FROM THE REVENUES AND ANY OTHER MONEY OR PROPERTY PLEDGED FOR SUCH PURPOSE, AND NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE COMMONWEALTH OF VIRGINIA OR ANY OF ITS POLITICAL SUBDIVISIONS, INCLUDING THE AUTHORITY, IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF OR INTEREST ON THIS BOND OR OTHER COSTS INCIDENT TO IT, IF ANY. THE ISSUANCE OF THIS BOND DOES NOT DIRECTLY, INDIRECTLY OR CONTINGENTLY OBLIGATE THE COMMONWEALTH OF VIRGINIA OR ANY OF ITS POLITICAL SUBDIVISIONS, INCLUDING THE AUTHORITY, TO LEVY ANY TAXES FOR THE PAYMENT OF THIS BOND.**

This Bond is fully registered as to both principal and interest in the name of the United States of America. Transfer of this Bond may be registered upon the registration books of the Bond Registrar. Prior to due presentment for registration of transfer, the Bond Registrar shall treat the registered owner as the person exclusively entitled to payment of principal and interest and the exercise of all other rights and powers of the owner.

Installments of the principal due on this Bond may be prepaid at the option of the Authority at any time as a whole or in part from time to time (but if in part, in inverse order of their maturities), without premium. Prepayments of installments of principal shall not affect the obligation of the Authority to pay the remaining installments payable as provided above.

All acts, conditions and things required by the Constitution and statutes of the Commonwealth of Virginia to happen, exist or be performed precedent to and in the issuance of this Bond have happened, exist and have been performed, and this Bond, together with all other indebtedness of the Authority, is within every debt and other limit prescribed by the Constitution and statutes of the Commonwealth of Virginia.

[REMAINDER OF PAGE LEFT BLANK; SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Washington County Service Authority has caused this Bond to be signed by the Chairman and the Authority's seal to be affixed and attested by the signature of the Secretary.

[SEAL]

**WASHINGTON COUNTY SERVICE
AUTHORITY**

By: Joseph Chase
Joseph Chase, Chairman

ATTEST:

Robert Cornett
Robert Cornett, Secretary

[SIGNATURE PAGE TO WASHINGTON COUNTY SERVICE AUTHORITY
SEWER SYSTEM REVENUE BOND, TAXABLE SERIES 2011B]

TRANSFER OF BOND

The transfer of this Bond may be registered by the registered owner or its duly authorized attorney upon presentation hereof to the Bond Registrar who shall make note of such transfer in books kept by the Bond Registrar for that purpose and in the registration blank below:

Date of Registration

Name of Registered Owner

Signature of Bond Registrar

CERTIFICATE OF PRINCIPAL ADVANCES²

The amount and date of principal advances not to exceed the face amount hereof shall be entered hereon by an authorized officer of the United States of America, when the proceeds of each such principal advance are delivered to the Authority.

<u>Amount</u>	<u>Date</u>	<u>Authorized Signature</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

² Certificate of Principal Advances to be used if the Government requests provision for principal advances.