

Town of Altavista Town Council Work Session Agenda

Tuesday, April 25, 2017

5:00 PM Council Work Session

- 1. Call to Order
- 2. Agenda Amendments/Approval
- 3. Public Comments Agenda Items Only
- 4. Introductions and Special Presentations
 - a. Project Updates (Hurt & Proffitt)page 2
 - i. 7th Street Sidewalk
 - ii. Charlotte Avenue/Alley Drainage

5. Items for Discussion

- a. Purple Heart Community Considerationpage 3 7
- b. Broadband Study/Implementationpage 8 14
- c. Use of Parks for "Gus the Bus" programpage 15 17
- d. IALR Update PCB project (Dr. Lowman)page 18 28
- e. Classification/Compensation Study Adoption/Implementationpage 29
- f. Delinquent Utility Accounts 5 year write offpage 30 32
- 6. Public Comments Comments are limited to three (3) minutes per speaker.
- 7. Closed Session
- 8. Adjournment

NEXT SCHEDULED REGULAR TOWN COUNCIL MEETING: TUESDAY, MAY 9, 2017 @ 7:00 p.m.

<u>Notice to comply with Americans with Disabilities Act:</u> Special assistance is available for disabled persons addressing Town Council. Efforts will be made to provide adaptations or accommodations based on individual needs of qualified individuals with disability, provided that reasonable advance notification has been received by the Town Clerk's Office. For assistance, please contact the Town Clerk's Office, Town of Altavista, 510 Seventh Street, Altavista, VA 24517 or by calling (434) 369-5001.

Thank you for taking the time to participate in your Town Council meeting. The Mayor and Members of Council invite and



Town of Altavista, Virginia Work Session Agenda Form

Date: April 25, 2017

Agenda Item: Project Update

Summary: Representatives from Hurt & Profffitt will be in attendance to go over the engineering design/layout of the two projects listed below:

- 7th Street Sidewalk/Drainage
- Charlotte & 5th Street Drainage

Following the presentation, Council may wish to give direction to staff on the manner in which to proceed with the projects.

- Option A: Complete Design Work and Bid the projects. (Either one or both) Funding of the projects would need to be discussed.
- Option B: Do not proceed with the projects.

Staff Recommendation: Continue to move forward with the projects.

Attachments: None (Engineer will provide information at the meeting)

Budget/Funding: The engineers will share the estimated costs at the meeting; some of the components should be eligible for use of VDOT Maintenance funds. The remainder funding would come from Town sources.

Legal Evaluation: The Town Attorney will be available to address legal issues.

Council Recommendations:

 \Box Additional Work Session \Box Regular Meeting \Box No Action

Town of Altavista, Virginia Work Session Agenda Form

Date: April 25, 2017

Agenda Item: Consideration of becoming a Purple Heart Community

Summary: Recently Mr. Dennis Janiak with the "The Military Order of the Purple Heart" Chapter 1607 VA., approached staff about its interest in being designated a "Purple Heart" Community. Attached is information about the goal of the designation and the conditions. The conditions are related to the Town having signage indicating the designation, recognition/celebration of Purple Heart Day (August 7th) and other items that may be adopted by Town Council.

At this point, staff is seeking Council's direction on this item:

Option A: If interested, Mr. Janiak would be invited to a future Council Regular Meeting or Work Session to give a brief presentation on the Purple Heart designation. Council could then adopt a resolution requesting such designation.

Option B: Take No Action.

Staff Recommendation: Schedule a presentation at a future Regular Meeting or Work Session of Town Council.

Attachments: Designation Procedure; Purple Heart sign

Budget/Funding: N/A

Legal Evaluation: The Town Attorney will be available to address legal issues.

Council Recommendations:

 \Box Additional Work Session \Box Regular Meeting \Box No Action

DRAFT/DRAFT/DRAFT/DRAFT

[January 13, 2016]

PROCEDURE FOR PURPLE HEART DESIGNATIONS

General

The overall goal in designating Purple Heart entities is to make the public more aware of the Purple Heart Medal award and to gain benefits for veterans in return for designations. The process begins at the Chapter level. The program began in 1932 as the Purple Heart Trail Program to have roads, highways, bridges, etc. designated with distinctive signage. But now requests for designations have swelled to include colleges, universities, towns, cities, states, counties, airports, rest areas, sports teams and their facilities and a variety of businesses – local and national. This procedure will standardize requests and approvals and ensure that veterans get some benefits in return, particularly from commercial interests, and/or the Purple Heart is honored.

Eligible Entities and Conditions

Cities and Towns

Conditions: Must place signage indicating place is a Purple Heart location at appropriate points; provide veterans free or reduced cost admission to municipal facilities (zoos, pools, parking facilities, etc.), celebrate Purple Heart Day, August 7 by flying Purple Heart flag, displaying a Purple Heart banner, change the exterior lighting of a government building from white to purple for that day, etc.,

Counties, Boroughs, States

Conditions: Provide veterans with tax relief, reduced fees at parks, zoos, parking facilities, celebrate Purple Day on August 7, place signage indicating Purple Heart status, etc. States should offer Purple Heart auto license plates at no or reduced cost and give veterans a break on taxes.

Purple Heart Trail System - Ground Transportation Related. Roads, streets, highways, bridges, tunnels, footpaths, rest areas, etc.

Conditions: Entities must have signage but design and placement will be determined by the controlling state or county. Local MOPH Chapters or Departments can suggest wording and designs if asked. Some existing signs read: "Purple Heart Trial" (with Medal), "Purple Heart Memorial Highway" (with medal), "Military Order of the Purple Heart Drive" (no medal), Military Order of the Purple Heart Highway" (with medal). With medal) and "Military Order of the Purple Heart Bridge" (with and without medal). With many of these designations, the main benefit is making the public aware of the Purple Heart Medal. *If the highway or bridge to be designated requires tolls, try to get free or reduced tolls for military, active duty and veterans, in return for designation.*

Airports

Conditions: Be supportive of veterans by: having USO or YMCA canteen services in terminal, offer discount on purchases of food and sundries in terminal, offer free or discounted fees on parking and mark the airport as a Purple Heart facility with signage on the building or on the approaches to the terminal.

Businesses: Any reputable business (Car wash, home building suppliers, local restaurant, grocery store, or gas station, etc.)

Conditions: While we certainly would be receptive to designating a local business, we would rather try to get the corporate entity to be designated and your input on a local branch wanting to be designated would be the catalyst. We would try to get the Corporate HQ to provide discounts at all their corporate and franchise outlets nationwide in return for being designated. Home Depot, for example, now provides the military, both active and retired a discount on purchases. Hopefully, the new ID for all veterans now leaving active duty will suffice for proof of service.

Universities, Colleges or other learning institutions:

Conditions: Can be designated but must give veterans a discount on tuition or classes, attempt to establish a veteran's center and be receptive to distributing MOPH literature.

Sports Teams and Stadiums: Local and national teams.

Conditions: In return for designation, we would be looking for discounts on admission tickets, purchase of refreshments, and parking; maybe PH logos on uniforms, signage on the stadium, logo on the game programs,

Special. Chapters and Departments should be sensitive to unique opportunities for PH designation – for example, in the Washington DC area; there are plans to construct a light rail line to be called the Purple Line.

Action:

Chapter Commander

- Will be the prime movers of the program, identifying appropriate entities to be designated and taking the following actions:
- Submitting Request for Purple Heart Designation to Purple Heart Designations Coordinator, information to National Adjutant, Communications, and Department Commander. using the email form in attachment 1
- If approved, Chapter will take all necessary action to make the designation a reality. See attachment 2 for some suggestions on how to make it happen. For most instances, local officials or business leaders will take action once approved. For some designations, such as major cities, highways and states, legislation may be involved and you'll work with your local legislator or city mayor or state governor.
- Once accomplished, Chapter or awardee will make announcements in local media of the designation and arrange for an appropriate ceremony to present a certificate or plaque.

- Once the designation is complete, Chapter Commander will notify Purple Heart Designations Coordinator (<u>ifvarescka@windstream.net</u> and HQ Communications (<u>communications@purpleheart.org</u> so that Communications can update the website.
- Chapter will monitor its designated entities to ensure agreed upon benefits to veterans are being delivered and recommending designation be withdrawn if entity is not in compliance.

Department Commander

Will monitor Chapter requests and provide assistance as appropriate.

National Purple Heart Trail Coordinator

- Provide advice and information to National Commander and other National Officers on the Purple Heart Designation Program.
- Coordinate with the National Adjutant on planning and administration of the Designation Program.

Communications (HQ)

- Draft instruction on Designation Program for approval by National Adjutant and then maintain approved document.
- Process each Designation Request, have National Adjutant approve or not approve each request and send email on that decision to requester.
- Upon notification from Chapter Commanders of completion of new designations of Purple Heart entities, update the Purple Heart Designation section of the MOPH website.
- Provide continuous guidance and information to Departments and Chapters on the Program.
- Keep MOPH Public Relations informed on all significant developments in Designation Program.
- Issue a quarterly report to all concerned reporting new designations.
- Prepare an annual one to two page summaries on Purple Heart Designations not later than June 30 to be approved by the National Adjutant. This report will become part of the Convention Delegate Book issued to all attendees.
- Support the Purple Heart Trail Coordinator as requested.

National Adjutant

- Coordinate with the Purple Heart Trail Coordinator on overall planning and administration of Purple Heart designation program.
- Approve or disapprove designation requests staffed by Communications.
- Coordinate any funding required for the program.
- Approve annual summary on Designation Program for Convention Delegate Book.





Town of Altavista, Virginia Work Session Agenda Form

Date: April 25, 2017

Agenda Item: Broadband Study/Implementation update

Summary: Through the assistance of a Virginia Telecommunications Planning Initiative (VATPI) grant from the Virginia Department of Housing and Community Development (DHCD), the Town hired Design Nine to conduct a study on Broadband Planning. Dr. Cohill made a presentation on the study at the January Town Council Work Session.

At that time, Council asked staff to keep this item on their radar. Attached please find a memo from Dennis Jarvis, regarding an update with a revised cost for initial implementation. Installation of a municipal broadband system is identified in the Town's Capital Improvement Plan (FY2019).

At this point, staff is seeking Council's direction on this item.

Staff Recommendation: Explore grant opportunities for this project.

Attachments: Staff Memo; Cost Options with Maps

Budget/Funding: No funding is included in the current FY217 budget nor the Proposed FY 2018 Budget. Installation of a municipal broadband system is identified in the CIP for FY2019 in the amount of \$431,000.

Legal Evaluation: The Town Attorney will be available to address legal issues.

Council Recommendations:

 $\hfill\square$ Additional Work Session $\hfill\square$ Regular Meeting $\hfill\square$ No Action



Altavista Broadband Study Update

From: Dennis Jarvis, II

To: J. Waverly Coggsdale, III

Design Nine prepared a revised cost estimate and design plan for the proposed municipal broadband network for the downtown business and residential district. The original option provided Altavista an option to:

- Build a basic system with basic infrastructure (Dark fiber, wires pole access)
- Provide a low cost and low maintenance system to manage and maintain
- Sustainable, by leasing infrastructure to private sector providers

The initial option and the cost revision would/will complete the following:

- Be a "starter project" in downtown residential/business district
- Would enhance value of current buildings and properties in the downtown district
- Increase competition for broadband services- Increased services, options, and lower costs
- Both options still provide access to a WISP Network (wireless Internet service provider or WISP). The network will utilize the existing light poles for the installation of the network.
- Install Meet-Me Box/Fiber Drops:
 - > These will reduce the cost of expanding fiber to additional customers in Altavista
 - Increase competition
 - > Provide revenue from leases by private sector
 - > Attract multiple private sector providers

The differential in the initial estimate and option two is decreasing the miles of fiber installed and the number of initial customers that could be served:

Option I: Total cost \$334,520.34 1.9 miles of fiber installed. 50 potential customers connected

Option II: Total cost: \$269,010.97 1.3 miles of fiber installed 45 potential customers connected

Cost savings of \$65,510

Option II eliminates the extension of dark fiber down Amherst Avenue

Our funding options remain the same. Town council will have to have a local match however a majority of the funding can be sought from CDBG grants, Federal EDA programs, USDA, and financial support from business and private properties- (similar to tap fees for water/sewer)



February 1, 2017

Option One: Original downtown fiber routes with extensions for wireless service Summary of Costs

Ι	ITEM/PROJECT	ESTIMATED			
2	Down Town Altavista Construction Materials	\$47,733.36			
3	Down Town Altavista Distribution Labor	\$111,096.00			
4	Down Town Altavista Structures, Cabinets, and Equipment	\$22,215.00			
5	Down Town Altavista Drop Construction	\$58,750.00			
6	Network Construction Subtotal	\$239,794.36			
7	Project Management, Network Engineering, Integration, and Testing	\$40,765.04			
8	Engineering, Permitting	\$8,550.00			
9	Misc Fees, Advertising, Technical Services	\$10,000.00			
10	Bookkeeping and Administration	\$5,000.00			
	Other Costs Subtotal	\$64,315.04			
12	Project Total	\$304,109.40			
13	Contingency at 10%	\$30,410.94			
14	Project Total (with contingency)	\$334,520.34			

Infrastructure Overview

I	ITEM/PROJECT	VALUE
2	Miles of Fiber / Conduit Installed	1.9
3	Number of Handholes Installed	13
4	Splice Closures Installed	34
5	Cabinets Installed	I
6	Number of Customers Connected	50

Infrastructure Analysis

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I	ITEM/PROJECT	ESTIMATED
2	Total cost per mile	\$176,063.34
3	Distribution construction cost per mile	\$126,207.56
4	Distribution cost per mile (no drops)	\$95,286.51
5	Total Cost per building passed	\$3,345.20
6	Total Cost per building connected	\$6,690.41
7	Drop Costs per building connected	\$1,175.00







Option Two: Shortened downtown fiber routes

	Summary of Costs				
	ITEM/PROJECT	ESTIMATED			
2	Down Town Altavista Construction Materials	\$33,959.22			
3	Down Town Altavista Distribution Labor	\$82,152.00			
4	Down Town Altavista Structures, Cabinets, and Equipment	\$22,215.00			
5	Down Town Altavista Drop Construction	\$52,875.00			
6	Network Construction Subtotal	\$191,201.22			
7	Project Management, Network Engineering, Integration, and Testing	\$32,504.21			
8	Engineering, Permitting	\$5,850.00			
9	Misc Fees, Advertising, Technical Services	\$10,000.00			
10	Bookkeeping and Administration	\$5,000.00			
	Other Costs Subtotal	\$53,354.21			
12	Project Total	\$244,555.43			
13	Contingency at 10%	\$24,455.54			
14	Project Total (with contingency)	\$269,010.97			

Infrastructure Overview				
	I	ITEM/PROJECT	VALUE	
	2	Miles of Fiber / Conduit Installed	1.3	
	3	Number of Handholes Installed	9	
	4	Splice Closures Installed	30	
	5	Cabinets Installed	I	
ſ	6	Number of Customers Connected	45	

Infrastructure Analysis

I	ITEM/PROJECT	ESTIMATED
2	Total cost per mile	\$206,931.52
3	Distribution construction cost per mile	\$147,077.86
4	Distribution cost per mile (no drops)	\$106,404.78
5	Total Cost per building passed	\$2,989.01
6	Total Cost per building connected	\$5,978.02
7	Drop Costs per building connected	\$1,175.00





Town of Altavista, Virginia Work Session Agenda Form

Date: April 25, 2017

Agenda Item: Use of Parks for "Gus the Bus" program

Summary: Attached is an email from Mrs. Jane Green, Altavista Elementary School Librarian, concerning a summer program that "combats summer learning loss and food scarcity" with children in Altavista. She is requesting use of areas at the Avondale Park and the Leonard Coleman Park (School/15th Streets) for the program. This is the same request as last year. If Council reaches a consensus on this item, it can be placed on the May Regular Town Council Meeting Consensus Agenda.

Staff Recommendation: Allow use of these areas for the Gus the Bus program.

Attachments: Email (Jane Green); Map showing locations

Budget/Funding: N/A

Legal Evaluation: The Town Attorney will be available to address legal issues.

Council Recommendations:

 $\hfill\square$ Additional Work Session $\hfill\square$ Regular Meeting $\hfill\square$ No Action

From: Jane Green [mailto:jgreen@campbell.k12.va.us]
Sent: Sunday, March 26, 2017 4:32 PM
To: Daniel Witt <<u>dnwitt@altavistava.gov</u>>
Subject: Gus the Bus!

Hi Dan,

We are gearing up for another summer of Gus the Bus! We have a few hurdles to overcome -like getting Gus in good enough shape to make the trips. But either way, we still want to have our summer program to help combat summer learning loss and food scarcity with our children of Altavista. May we have permission again to use the park at Avondale and 14th St. and the Coleman Memorial Park? They are both such good locations, and lovely parks.

We will begin after school is out in June and continue until school starts in August.

Thanks, Jane

--

Jane Green Librarian, Altavista Elementary School Campbell County Schools 2190 Lynch Mill Road Altavista, VA 24517 434-369-5665

GUS the Bus Location Requests



Agenda Item 5d

Town of Altavista, Virginia Work Session Agenda Form

Date: April 25, 2017

Agenda Item: IALR Update – PCB Project (Dr. Lowman)

Summary: The Institute of Advanced Learning and Research (IALR) in Danville has been conducting research studies for PCB remediation efforts associated with the Town's Emergency Overflow Pond (EOP). Attached is the "Final Report" provided by Dr. Lowman.

Staff Recommendation: Accept the IALR "Final Report" and submit to DEQ.

Attachments: IALR "Final Report"

Budget/Funding: N/A

Legal Evaluation: The Town Attorney will be available to address legal issues.

Council Recommendations:

 $\hfill\square$ Additional Work Session $\hfill\square$ Regular Meeting $\hfill\square$ No Action

ALTAVISTA WWTP PCB BIODEGRADATION FINAL REPORT

ALTAVISTA WWTP ALTAVISTA, VIRGINIA VDEQ FILE NO. VRP000320

Submitted to:

Mr. Waverly Coggsdale III Town Manager Town of Altavista 510 Seventh Street Altavista, Virginia 24517

Prepared by:

J. Scott Lowman, Ph.D. and Chuansheng Mei, Ph.D. The Institute for Advanced Learning and Research 150 Slayton Avenue Danville, Virginia 24540

April 21, 2017

1.0 INTRODUCTION

Prior to the 1970s, PCBs were commonly used in many industrial settings, including electrical transformer cooling oil, hydraulic oils, lubricants, cutting oils, and printer's ink. In many instances, these fluids were disposed of in floor and sink drains, eventually finding their way to municipal and industrial sewage processing facilities. These practices were not illegal and commonly accepted prior to their ban. Almost forty years later, these persistent compounds remain in the systems where they were disposed. The amount and commonality of this type of PCB contamination has not been estimated, but is likely common given the amount of industrial manufacturing that took place in the US from 1930 to 1977. While PCBs are persistent and relatively stable in the environment, they are also organic molecules and are subject to anaerobic dechlorination and aerobic metabolism by various bacteria.

Several methods are used to remediate PCBs in contaminated soil or sludge. Traditional remediation methods of PCB-contaminated soil or sludge use physical and/or chemical treatments including dig and haul, solvent extraction, thermal alkaline dechlorination, incineration, or landfilling (Campanella et al. 2002). These methods are very costly and not environmentally friendly. In cases such as dig and haul and landfilling, the risk may stay with the locality or industry where the contamination originated, and the contamination is spread in the process.

Bioremediation of PCBs has gained more attention in the last decade because it uses living organisms and systems, including plants and microorganisms, to break down these toxic compounds. Generally, bioremediation includes phytoremediation, microbial remediation, and/or combination of plants and microbes. Phytoremediation often uses living plants to absorb, accumulate, and/or degrade and remove contaminated toxic compounds from the soil, and poplar trees are perhaps the most commonly used plants to remediate sites contaminated with toxic compounds in the US. However, in the presence of these compounds, plants can suffer serious damage, showing slow growth or abnormal development, often leading to slow removal and incomplete degradation. They may also simply uptake and augment in plants because they lack the catabolic enzymes needed to degrade organic pollutants. Unlike phytoremediation, microbial remediation uses bacteria or fungi to degrade and remove soil contaminants via specific enzymes which can break down these toxic compounds. For example, Burkholderia xenovorans LB400, formerly known as B. fungorumis, a potent PCB-degrading bacterium and Pandoraea pnomenusa B-356, have biphenyl dioxygenase (bph) genes which code for enzymes that can break down PCBs. The combination of plants and bacteria is a promising way to remediate contaminated soil and sludge in industrial and municipal waste water treatment facilities.

Altavista is an incorporated town in southwestern Campbell County, Virginia and has been home to a vibrant industrial base since the beginning of the 1900s. For many years prior to the late 1970s, PCBs were unknowingly deposited by these industries into the towns waste water overflow pond

(WWTP). After initial site testing and the determination through monitoring wells that the contaminants were not entering the ground water, the town began exploring options to clean up the facility.

Based on previous work on the bioenergy crop switchgrass and beneficial bacterial endophytes, scientists at the Institute for Advanced Learning and Research conducted preliminary experiments on site. These tests utilized a combination of switchgrass, bacterial endophytes, and PCB degrading bacteria for PCB remediation. This document presents experimental methodology and data generated from a two year study focused on the utility of combining the fast growing bioenergy crop switchgrass (*Panicum virgatum* L. cultivar Alamo) and a proven beneficial bacterial endophyte (*Pantoea agglomerans* strain PaKM) (Kim et al., 2016). Additionally, three treatment groups also received a consortia containing the known PCB degrading bacteria *Burkholderia xenovorans* LB400 along with two others isolated from the site.

2.1 PRE-EXPERIMENTAL TASKS

2.1.1 Review of all Toxic Substance Control Act (TOSCA)

Before beginning the experiment, scientists at IALR read and reviewed all TOSCA documents related to PCBs. This review, in addition to input from DEQ, indicated that a Health and Safety Plan (HASP) should be put into place before work began

2.1.2 HASP

HASP development for research on site: A set of guidelines to minimize and mitigate risks for researchers and site workers as well as liability for the Town of Altervista (TOA) was developed. Among other issues covered, proper personal protective equipment required is defined based on previously EPA accepted HASPs, what should and should not leave the site, and research waivers of liability are included. See Appendix A.

2.1.3 Literature review

A literature review was also performed to aid in experimental design.

2.2 EXPERIMENTAL PROCEEDURES AND RESULTS

2.1.1 Identification of sediment to use in the experiment

Site characterization was performed to determine experimental sediment locations to pull from at the TOA waste water treatment pond (WWTP). This included collection of samples near both the shoreline and hot spots identified in the 2003 Voluntary Remediation Report (VRR). Once the locations were chosen, a 1-inch PVC pipe was driven into the sediment until the clay liner was contacted. The plug of sediment was then extracted using a ½-inch PVC pipe inserted into the 1-inch PVC pipe. The resulting sludge samples were placed in clean glass jars provided by REIC (Beckley, West Virginia), packed on ice along with sample custody documentation, and scheduled for pick up at the Altavista WWTP facility. Samples collected for the investigation were analyzed for PCBs as Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260 according to U.S. EPA Method SW8082A (2/07) by REI Consultants, Inc. (Beaver, WV 25813). The goal of this sampling was to identify a hot spot to later collect sludge from for testing (Figure 4)



Figure 4. Initial sampling for PCB hot spots was done in areas previously identified as hot spots in the 2003 Draper Aden Report.

2.1.2 South Side Pond Sampling Summary

Because of the low levels found in Figure 4, the TOA requested sampling of the south side of the pond. This characterization (3-16-15) was performed to determine levels compared to the 2003 report which established the baselines (**Figure 5**)

Important findings:

- Of 47 samples taken 10' and 20' from the south shore, only 3 were above 100 mg/Kg.
- The average values of the samples were 27 and 40 mg/Kg respectively

- The 2003 values 50' from the shore were 1814 mg/Kg on average
- Only Aroclor 1242 was detected

20' from Shore			10' from Shore		
Sample Number	mg/kg Arocle	or 1242	Sample Number	mg/kg Aroclor 1242	
1	9.92		2	52.6	
3	17.1		4	49.7	
5	47.9		6	6.74	
7	29.2		8	16.9	
9	296		10	39.3	
11	16.1		12	29.3	
13	22.4		14	15.2	
15	8.72		16	6.86	
17	12.6		18	17.6	
19	27.9		20	11.9	
21	3.72		22	12.6	
23	12.1		24	152	
25	74.9		26	32.6	
27	na		28	6.73	
29	26.9		30	na	
31	1.4		32	22.1	
33	24		34	24.1	
35	24.3		36	3.26	
37	1.32		38	21.1	
39	7.2		40	39.7	
41	135		42	23.1	
43	65.8		44	10.5	
45	4.75		46	2.85	
Average	39.5		Average	27.1	

Figure 5. PCB Concentrations at 10 and 20 feet from the south shoreline.

2.1.3 Full Pond Re-characterization

Figure 6 represents the findings of the 2015 pond re-characterization. In 2003, the average of the PCBs levels tested were 1766 ppm. In 2015, an average of the PCBs levels tested were 183.3 ppm. Please see Appendix B for more details.



Figure 6. Results of the full pond re-characterization are represented as the bottom yellow number in mg/Kg. The top number are the results from the 2003 sampling.

2.1.4 Pond Side Field Experiment

In the winter of 2014, sediment was collected from site 5 (see above) and mixed with Miracle Grow Potting Mix (MG) to provide organic matter at a ratio of 70% sludge to 30% MG. The mix was homogenized by mixing with a shovel for 2 hours and divided equally into 60 three gallon pots. The pots were placed in a row on a manmade berm in the pond along with a solar powered precision watering drip system (**Figure 7**).

To measure the initial PCB concentrations, ten composite samples were taken from the 60 pots. This value represents the Day 0 concentration in all pots. Treatment groups were designed as follows: switchgrass (10), switchgrass + PaKM (10),

switchgrass + known bacterial PCB metabolizers (10), switchgrass + PaKM + PCB metabolizers (10), known PCB metabolizers alone (10) and blank controls (10) for a total of 60 pots. In pots with switchgrass, three 2 month old plantlets were planted per pot for a total of 30 plants per treatment. Planting took place June 6th, 2015. In pots inoculated with bacteria, the bacteria were grown overnight in the lab on a shaker and the cells were harvested by centrifugation.

The cells were then suspended in a buffer solution and adjusted to an optical density of 0.6. This solution, which contained LB 400 along with two suspected PCB degraders from the site, was used to Figure 7. Experimental setup on inoculate at a rate of 50ml per pot. At the end of the



berm

first season of growth, 5 composite samples were collected from each experimental treatment by taking one sample from each of 10 pots and combining them to make one composite sample. This was repeated 5 times per treatment group. The resulting samples were placed in clean glass jars provided by REIC (Beckley, West Virginia), packed on ice along with sample custody documentation, and scheduled for pick up at the Altavista WWTP facility. Samples collected for the investigation were analyzed for PCBs as Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260 according to U.S. EPA Method SW8082A (2/07) by REI Consultants, Inc. (Beaver, WV 25813).

2.1.4 Pond Field Experimental Results

Figure 8 represents data collected at the end of the first season along with the Day 0 sample average described above. At the end of the first growth season, control pots with soil alone (no treatments) saw a 37% reduction in PCB levels. The largest reduction was seen with pots inoculated with switchgrass plus PCB degrading bacteria. This treatment saw a 55% reduction in PCB levels compared to the Day 0 value and was the only treatment that was significantly lower than the control pots (p=.007). The switch grass alone treatment compared to control yielded a p value of .06 compared to the control pots. While not highly significant, this is worth noting. The results of all treatments as well as the controls were significantly lower than the day 0 value.



Figure 8. Average PCBs values of composite samples taken at the end of the first growth season. Error bars represent standard error.

Figure 9 represents the values of samples taken after the second season of growth (S2) along with the first season results and Day 0 value. These samples were collected in November of 2016. Data in this figure demonstrate that all treatments, including control pots, experienced further reduction of PCB levels. All treatments with the addition of PCB degrading microbes (soil plus microbes, switchgrass plus microbes, and switchgrass plus PaKM plus microbes) were significantly lower than the soil alone control pots (p<0.05). The treatment with switchgrass plus the beneficial endophyte PaKM plus the PCB degrading microbes gave the greatest reduction compared to control pots with a 47% reduction of PCB levels.



Figure 9. A summary of all values recorded through the two growing seasons. The error bars represent standard error. Season one values are represented as S1 and season 2 values are represented as S2.

3.0 CONCLUSIONS

At the end of two seasons, all treatment groups reduced the levels of PCBs tested in the sludge / organic matter media, including the control pots. This indicates that the addition of organic matter along with mixing has a beneficial effect on biological PCB degradation of the PCB congeners tested. The addition of microbes appears to have the most beneficial effect after two seasons, followed by the growth of switchgrass. The addition of the beneficial bacterial endophyte PaKM, which has been proven to promote switchgrass shoot and root growth (Kim et al., 2017), along with PCB degrading bacteria, appears to have the largest effect on PCB reduction.

4.0 REFERENCES

Chen Chen, Chunna Yu, Chaofeng Shen, Xianjin Tang, Zhihui Qin, Kai Yang, Muhammad Zaffar Hashmi, Ronglang Huang, and Huixiang Shi. "Paddy field–A natural sequential anaerobic–aerobic bioreactor for polychlorinated biphenyls transformation." *Environmental Pollution* 190 (2014): 43-50. Campanella BF, Bock C, Schröder P. 2002. Phytoremediation to increase the degradation of PCBs and PCDD/Fs. Environmental Science and Pollution Research. 9(1):73-85.

Draper Aden Associates. "Voluntary Remediation Report, Altavista WWTP, Altavista Virginia." (2003).

Kim S, Lowman S, Hou G, Nowak J, Flinn B and Mei C. 2012. Growth promotion and colonization of switchgrass (Panicum virgatum) cv. Alamo by bacterial endophyte Burkholderia phytofirmans strain PsJN. Biotechnol Biofuels 5:37



Town of Altavista, Virginia Work Session Agenda Form

Date: April 25, 2017

Agenda Item: Classification and Compensation Study Update

Summary: The Town contracted with Springsted to conduct a Classification and Compensation Study, which could be used as a tool to update the Town's Compensation Plan. The initial report was presented to Town Council at their January 2017 Work Session and staff has been working with the consultant to make several modifications to the study and subsequently the report.

The study reviewed the Classifications and the Class Descriptions (aka Job Descriptions) and presented new Classifications and Class Descriptions for the Town's implementation. Springsted also evaluated the Towns positions with other comparable agencies in development of the proposed classification and compensation plan. Staff is continuing to work with the consultant on development of a Merit Based Performance System; as well as staff training so that they can develop, maintain and update the plan.

The consultant proposed several different options for implementation, with Option 3 being their recommendation. Option 3 would bring all of the employees' salaries to the minimum of their proposed grade on the proposed scale and provide for an adjustment based on the number of years of service in their current position. The years of service component assists in addressing the "compression" issue between employees in the same positions but with varying experience in those positions. Staff would like to slightly modify the Option 3 proposal and provide any employee that would receive less than a 2% increase under the plan, with a 2% increase. Based on the latest review, the implementation of the proposed plan, utilizing Option 3 (with staff's modification), would be a total annual cost of approximately \$110,000. The total estimated cost of this option including benefits would be less than \$133,000, which is provided for in the FY2018 Proposed Budget. If Council reaches a consensus on this item, it can be placed on the May Town Council Regular Meeting Consensus Agenda for approval.

Staff Recommendation: Adopt the Classification and Compensation Plan recommended by Springsted utilizing the modified Option 3 guidelines for implementation.

Attachments: Final Report

Budget/Funding: FY2018 Budget - Approximately \$130,000 (included in Proposed Budget)

Legal Evaluation: The Town Attorney will be available to address legal issues.

Council Recommendations:

 \Box Additional Work Session \Box Regular Meeting \Box No Action

Agenda Item 5f

Town of Altavista, Virginia Work Session Agenda Form

Date: April 25, 2017

Agenda Item: Delinquent Utility Accounts Write offs

Summary: Annually staff presents to Town Council a request to write off delinquent utility accounts that are five years old and those of deceased individuals. The total amount of the write-off request is \$1,704.29. If Town Council reaches a consensus on this item, we would place it on the May Town Council Consent Agenda.

Staff Recommendation: Proceed with the write-off request as presented. (Place on May Town Council Consent Agenda)

Attachments: Staff memo with list

Budget/Funding: N/A

Legal Evaluation: The Town Attorney will be available to address legal issues.

Council Recommendations:

 $\hfill\square$ Additional Work Session $\hfill\square$ Regular Meeting $\hfill\square$ No Action



RE:	Delinquent Water and Sewer Accounts
FROM:	Tobie Shelton
MEMO TO:	Waverly Coggsdale
DATE:	April 18, 2017

Attached is a listing of delinquent water and sewer accounts which are over five years old. Our efforts to collect the delinquent billings have been unsuccessful. Annually we request Council to consider writing off and adjusting our financial records.

We have fifteen accounts over five years old totaling \$1,621.77; and two accounts for deceased individuals totaling \$82.52. The total write-off proposal is \$1,704.29.

I respectfully request Council's approval to write-off. We would like to clear these outstanding invoices within the current fiscal year.

Thank You.

PROPOSED WRITE OFF DELINQUENT WATER & SEWER ACCOUNTS April 25, 2017

ACCOUNTS OVER FIVE YEARS OLD

Name	Date Account Closed	Amount Past Due
Altisource	12/14/2011	\$ 9.00
Jason Baldwin	9/7/2011	\$ 88.58
Michelle Waller Coleman	8/15/2011	\$ 653.63
Karlton Davis	11/8/2011	\$ 55.63
Jacqueline D. Elliott	8/5/2011	\$ 15.54
Dewey Hendricks	7/6/2011	\$ 15.26
Susan Irby	8/18/2011	\$ 30.20
Roger Lambert	8/9/2011	\$ 177.86
Melinda Fox	9/6/2011	\$ 47.56
Tamara Nowlin	9/23/2011	\$ 69.19
Ruby J's	3/16/2009	\$ 75.74
Goldie B. Taylor	7/12/2011	\$ 8.55
Joanne Whiteside	10/17/2011	\$ 40.65
Everette Wood	9/15/2011	\$ 119.74
Kaleb Woods	10/17/2011	\$ 214.64
Sub-total		\$ 1,621.77

DECEASED INDIVIDUALS

Name	Date Account Closed	Amount Past Due
Lula Emerson	7/10/2013	\$ 14.45
Mary Coffer	9/14/2012	\$ 68.07
Sub-total		\$ 82.52
GRAND TOTAL		\$ 1,704.29