

STATE OF WEST VIRGINIA, COUNTY OF UPSHUR, CITY OF BUCKHANNON, TO WIT:

A special meeting of the Buckhannon Sanitary Board was held on Tuesday, January 11, 2022, at 7:30 a.m., in Council Chambers, by phone and GoToMeeting (GTM). The following were in attendance:

Mayor	Robbie Skinner	Absent
City Recorder	Randy Sanders	Present
Assistant Recorder/Director of Finance	Amberle Jenkins	Present
Director of Public Works	Jerry Arnold	Present
City Engineer	Jay Hollen	Absent
Board Member	Gene Frye	Present
Board Member	Phil Loftis	Present
Sanitary Superintendent	Ethan Crosten	Present
City Attorney	Tom O'Neill	Absent

Guests – None

To Participate in this Utility Board Meeting remotely, participants were invited to contact us at 304-472-1651 for the GoToMeeting link/access.

***City of Buckhannon Sanitary Board
Special Meeting Agenda for Tuesday, January 11, 2022***

A. Call to Order

- A.1 Moment of Silence
- A.2 Pledge to the Flag of the United States of America

B. Strategic Issues for Discussion and/or Vote

- B.1 Plan of Action
- B.2 Possible Action/Revisit Mini Excavator Bid Opening – Low Bid did not meet specifications

C. Board Members Comments and Announcements

D. Adjournment

POSTED 12/16/2021

REVISED 12/20/2021

A. Call to Order - The meeting was called to order by Recorder Randy Sanders who asked all to join him in a Moment of Silence followed by the Pledge to the Flag of the United States of America.

B. Strategic Issues for Discussion and/or Vote

B.1 Plan of Action – Recorder Sanders recognized the Director of Public Works, Jerry Arnold, who explained the reasoning behind the recommendation in the Plan of Action, presented by Sanitary Superintendent, Ethan Crosten, to initially reduce the line crews from the current two – 4 person line crews to two – 3 person crews.

In order to be successful with this scenario the department will use outside contractors, incorporating our on call engineering firm, for the larger projects allowing the Sanitary Departments line crew(s) to handle to day to day repairs, maintenance, preventative maintenance, and smaller projects.

Discussion by the Board Members with Ethan Crosten and Jerry Arnold took place and it was determined to be a prudent and acceptable plan for the department to pursue with the understanding that the Board would review the changes from time to time to see if it is necessary to change it.

No other action on this item was necessary.

**City of Buckhannon
Sanitary and Storm Department**



Plan of Action

Table of Contents

- 1.0 Documentation.....1
- 1.1 Line and Maintenance Checks.....1
- 1.2 Inventory Records.....1
- 1.3 Mapping Records.....1
- 2.0 Personnel.....1
- 2.1 Line Crew.....2
 - 2.1.1 Line Crew Immediate Future.....2
 - 2.1.2 Line Crew Intermediate Future.....3
 - 2.1.3 Line Crew Extended Future.....3
- 2.2 Maintenance Crew.....3
 - 2.2.1 Maintenance Crew Immediate Future.....3
 - 2.2.2 Maintenance Crew Intermediate Future.....3
 - 2.2.3 Maintenance Crew Extended Future.....4
- 2.3 Lab Crew.....4
 - 2.3.1 Lab Crew Immediate Future.....4
 - 2.3.2 Lab Crew Intermediate Future.....4
 - 2.3.3 Lab Crew Extended Future.....4
- 3.0 Line Projects.....5
- 3.1 Planned Projects.....5
- 3.2 Potentail Project.....5
 - 3.2.1 Sanitary Projects.....6
 - 3.2.2 Storm Projects.....6
- 4.0 Plant Projects.....7
- 4.1 Urgent Projects.....7
- 4.2 Future Projects.....8
- 5.0 Pump Station Projects.....8
- 5.1 Urgent Projects.....8
- 5.2 Future Projects.....8

List of Appendices

- Appendix A: Manhole Maintenance Checklist
- Appendix B: Manhole and Line Maintenance Report
- Appendix C: Pay Rate Update
- Appendix D: Sanitary Sewer Projects
- Appendix E: Storm Sewer Projects

1.0 - Documentation

The Sanitary and Storm Department have done many purposeful and quality projects. Good documentation has been kept for maintenance records, line extensions and upgrades, equipment checks, and lab data. There are still other items that can be documented better.

1.1 – Line and Maintenance Checks

Currently, there is no inspection guide or schedule for the manholes and lines in the system. This is something that needs developed. The department knows where areas are that have issues and check them regularly, but there is no record of these checks. This would be beneficial to insurance claims regarding sewer backups. Having these records would help prove the City is doing their duties. It will also help identify where future projects need to be based on the condition of the lines and manholes. A potential record of these checks would be in the form of a check list. An example of what this form may look like is in Appendix A. If work is done the “Maintenance/ Inspection Report” from the Sewer Back up Policy, found in Appendix B of this document, shall be completed and filed.

1.2 – Inventory Records

The sewer department has many fittings, pipe, manholes, lids, rings, and tools available. It would be purposeful to keep track of what all is readily available at the plant. This will help keep track of what is needed to be ordered for projects and to know that we have enough available materials for emergency fixes. For tools it will help track the age of the tool and give us a better idea of when it might be time to replace old tools and equipment.

1.3 – Mapping Records

The sewer department currently has many hand drawings that need to be transferred or updated to the based maps. This needs to be more of a priority. Not only do the updated and accurate maps help project planning go more smoothly for the sewer department, but for the entire city. Knowing where everything is will help with miss utilities, pipe age and more.

2.0 – Personnel

The employees within the department are the biggest assets. Many of the employees are very skilled and/ or knowledgeable about what they do and the plant could not operate without them. However, it would be beneficial to slightly downsize on the number of employees within the department due to changing circumstances within city operations, mainly the addition of on-call engineering services. This will be done through attrition, so no employee will be fired or let go.

2.1 – Line Crew

The line crews will be the main source of reduction as it would be beneficial to go from two line crews to one. Larger projects, such as Spring Street and 33 West North Side, will be handled by the on call engineering firm. By doing this it will allow for the remaining in house line crew to focus on smaller extensions and upgrades, and allow for better maintenance on existing lines. This also seems to provide better financial stability. While contracting out work typically costs 30-40% more than in house work. Only having one line crew requires half the equipment, equipment maintenance, and operating costs. When it is not construction season the city will not be responsible for paying employees which little work is available to. Sewer taps, complaints, and maintenance can keep one crew busy through the winter months; it is difficult to keep two crews productive for that long during the winter.

2.1.1 – Line Crew Immediate Future (next 1 year)

The line crew supervisor and mapping coordinator, Jeff Ford, is planning on retiring within the next year. Jeff is very valuable to the department and has been here 20 some years. Since there

are crew chiefs already in place for both crews, the line crew supervisor position will not be filled and the crew chiefs will each be responsible for their own crew. Cody Tenney has been working under Jeff off and on for some time now. He is the ideal candidate for the job as he is already familiar with many of Jeff's duties such as miss utilities, purchase orders, complaints, mapping and ordering materials.

Kevin Ware, a Crew Supervisor, has been having health issues for some time now and is scheduled for surgery in October. This will require him to be off for at least 3 months until January. Kevin has not mentioned retiring but there is a possibility. If Kevin was to retire Scott Crites would be the best candidate for that job. He has the most experience on that crew and is very knowledgeable about sewer construction. This would leave this crew with only two full time employees and a part time employee. Cody may have to help on this crew when needed as well as the other line crew to help construction continue.

2.1.2 – Line Crew Intermediate Future (next 5 years)

The other line crew supervisor, Brian Mitchell, is nearing retirement age. Assuming he does retire within the next 5 years, he would be the 3 person to either retire or be moved off the line crews. At this point, it would be reasonable to combine the line crews. This would leave a single 5 man crew. Unless someone was to leave unexpectedly it may have to stay like this for a few years. There could be an opportunity to move one of the line crew employees to the maintenance crew; where there could be an opening in this time period. This would be ideal for both crews. The line crew would be operating with 4 employees and the maintenance crew would get someone which is familiar with operations and would need less training than a person hired from the outside.

2.1.3 Line Crew Extended Future (next 10 years)

Given there are no unexpected losses or retirements in this time, the four man crew could remain the same and operate with consistency. Getting to work with the same crew will allow each person to know their role and become more efficient. At this point if there is a loss it would be necessary to advertise for an opening and hire a new employee. This will allow them to work with other experienced employees and gain knowledge so there is no drop off as others begin to retire.

2.2 Maintenance Crew

The 3 man maintenance crew is essential to plant operations. Many jobs they perform require at least two of people for safety precautions. Keeping what is already a part of the system operational needs to be a priority. This crew does an excellent job of help achieve that goal.

2.2.1 Maintenance Crew Immediate Future (next 1 year)

Given there are no unexpected losses, this crew should be able to operate as is for the next year at least.

2.2.2 Maintenance Crew Intermediate Future (next 5 years)

The Maintenance supervisor, Dave Currance is currently old enough to retire. Similar to others, he is not mentioned retirement to this point but there could be a possibility he retires in the semi near future. If Dave were to retire in this time frame Steve Reed would be the best candidate for his job. He has been a part of the sewer department for many years and is knowledgeable about the operations.

At this point a member of the five man line crew would preferably be moved to the open maintenance position. If no one wants this position it would be necessary to hire someone new.

If a crew member is off work the operations can still go on and someone new would be receiving training from experienced employees.

2.2.3 Maintenance Crew Extended Future (next 10 years)

In the next 10 years Steve Reed could retire. He has not mentioned this but again, he would be of age. If this were to happen Josh Streets would be the preferred person to fill the position of maintenance supervisor. Josh is very capable and by this time he would have been learning from Dave and/or Steve for nearly a decade. He would have the skills and knowledge to do this job.

At this point someone new would need to be hired again to keep the maintenance crew at 3 people.

2.3 Lab Crew

The lab crew consists of 2 people, Chief Operator and a laboratory assistant. This crew ensures that the plant is operating effectively and efficiently. This is the most technically complicated crew as many of their results are needed to keep permits renewed and the plant operating.

2.3.1 Lab Crew Immediate Future (next 1 year)

This crew should remain how it is currently operating for the next year.

2.3.2 Lab Crew Intimidate Future (next 5 years)

The lab assistant, Donald Tenney, would be nearing retirement age in the time frame. If he were to retire, someone new would need to be hired to replace him. From this position I would prefer someone with some experience so the plant can still operate when Jason Tenney, the Chief Operator, is off. Preferably this Person would not be someone too old, so they can learn under Jason and have plenty of time to get their Operators licensing if they do not already. Jason is very knowledgeable about the plant operation and training someone for years under him would be beneficial to plant operation.

2.3.3 Lab Crew Extended Future (next 10 years)

Hopefully this crew could continue to operate as is for this time span.

2.4 Updated Pay scale

Bryan “buck” Samples developed a pay scale for employees. This has the potential pay based on position, experience and certifications/ skill. I believe this is a fair set of wages and will be necessary to retain and hire new employees which are crucial to the operation of the plant. These proposed wages can be found in Appendix C.

3.0 Line Projects

The lines in the collection system have grown and been upgraded greatly in the past few decades but there is always room for improvement. There are projects that are currently in different phases of the design and/or construction process.

3.1 Planned Projects

North Spring St. is finished; we are now looking at other projects to move on too. We would like to move back out to 33 West North Side to finish up everything out there. Dave Anderson (Corridor H tire) possibly will require us to extend the line to his property barring his cooperation. Mike Ross has an area across from Red Rock Road that he has mentioned wanting sewer. This would give us an opportunity to reach other customers that do not have sewer service.

Wilt and Turansky's development could be another potential project we work on soon barring we are able to obtain ROW. Initially this project was going to have to be contracted out but since they have pushed it back our crews may be able to complete it now.

Taylor Street sanitary and storm sewers are in desperate need of upgrade. This project will be handled by Potesta, the new on call engineering services.

There is an aerial crossing over Finks Run that is at risk of failing. This needs to be a priority because if it was to fail, and sewage was dumped into the creek, the sewer department and City would be in trouble with various environmental agencies.

We need to go back and fix yards that have been disturbed by line replacement as well. We have gotten behind on this due to the Spring St. project but need to catch up.

3.2 Potential Projects

There is a large list of potential sanitary projects listed in Appendix D and storm projects listed in Appendix E. These were taken from Sam Ludlow's, "Long Term Control Plan"(LTCP). This list will continue to grow as our maintenance schedule shows new areas of concern and other problems arise. I would like to start focusing more on storm projects. From my understanding these have been pushed to the way side for many years and now storm issues are become frequent. Stricter storm regulations will be coming in the near future. Developing storm projects will help minimize issues.

3.2.1 Sanitary Projects

Gum / Chestnut Street are listed as a high priority in the LTCP. There are storm issues in this area that I believe are going to be addressed relatively soon due to recent flooding events. I think the way Spring Street was done, upgrading all the utilities at once, is an excellent way to do projects. This disrupts an area once as opposed to many times in close time periods. Developing a project to address the sewer problems at the same time as storm problems are being address would be wise in my opinion.

Upper Shawnee is the only remaining high priority from the LTCP. I am not familiar with this area or its issues, but that is something I believe needs looked at since Sam had is listed that high.

East Lincoln and Third Ave @ Florida is listed as medium level priority. This project is relatively inexpensive and should be developed if money gets tight towards the end of a fiscal year and need a job to work on.

3.2.2 Storm Projects

The Ritchie Street storm sewer has caused some issues for the resident at 121 Barbour Street. The city has not been negligent but something still needs done. The storm sewer in the problem area is 12", above this area is 15", and below the area is 18". This has happened in part because a garage has been built over the storm line, which complicates the project, but there is still an issue which needs addressed.

There is culvert carrying Jawbone Run under Lincoln Street which turns to open channel in the lot west of Maple Street until it feeds back into a culvert which goes under Maple Street. There needs to be a head wall and possibly wing walls built at the inlet of the culvert because it is eroding away the bank. There is approximately 10' of smaller pipe feeding a larger pipe that needs removed before this can happen. Jay Hollen and Jerry Arnold both agree this needs addressed and a project will be developed to fix this in the near future.

As mentioned earlier, there are recent flooding issues that have become more prevalent to the Gum, Swisher, Kepner and Myrna Street areas. This is something that will require studies and

much design to try and mitigate these issues. This is looking like a project that will be handled by Potesta.

This covers all the storm issues in the LTCP but this is not the end of the storm issues in Buckhannon. Observations will have to be made and issues will arise to help identify what needs upgraded and fix in the storm system.

4.0 Plant Projects

The plant has been operating for many years efficiently but is almost 40 years old and things need upgraded or replaced. There a few projects needing to take place. Plant projects are listed in Appendix F.

4.1 Urgent Projects

The plant is in need of an automatic bar rack. This will help remove rags and other large debris that builds up at the influent of the plant. If the current bar rack is not cleaned manually regularly is restricts the flow of sewage into the plant. This is a major issue during day of high flow. The automatic bar rack would disposed of the rags more efficiently. The automatic bar rack has been budgeted before but was replaced due to failure of a UV unit.

The emergency effluent pumps are not working as they should. These pumps are in place to pump out the treated water when the river is at flood stage, keeping the flapper valve on the effluent pipe shut. If the water is slightly dirty the pumps will not pump at full capacity, causing water to back up into the plant.

The oxidation ditches need sludge and sediment cleanout of the bottom. I have heard estimates that 4 feet of the 11 foot ditches are full of sedimentation. There are a few issues/ concerns that need address before this can proceed being done, they are:

- How to repopulate the bug and microorganisms that are required to be in the ditch once it is drained and refilled.
- What to do with the sedimentation being removed from the ditch.
- Mark Sancoff of Potesta expressed concern of the ditches collapsing is the water is removed. We would need to be certain this would not happen somehow.

The backup generator needs replaced, like the plant, this generator is nearly 40 years old. Jay Hollen has worked to get FEMA grants to replace this generator. In the event of a power outage, this generator would keep the plant operational so sewage would not be backing up in the system and plant.

4.2 Future Projects

The storm drainage system is having issues at the plant. This system catches run off from the sludge storage bays to be treat as opposed to running directly into the river. This needs address in the future.

The decant tanks recently had 3 tons of rags removed from them. During the removal process an employee was stuck with a needle. There needs to be a way to prevent rags from reaching them to prevent this from happening. The automatic bar rack would help with this. Until then I believe they should be cleaned every other year to prevent as much build up in the bottom of the tank.

5.0 Pump Station Projects

The sewer collection system currently has 17 pump stations, 15 of which are outside of the plant area, and a potential new pump station. These stations are another vital part of the sewer system. Pump station projects are listed in Appendix F.

5.1 Urgent Projects

Three of the pump stations, Weston Rd., Route 20 North, and Brushy Fork, have aging pumps that are at risk of failing. We are working on getting a quote to see how much it would be to get 3 new pumps to have as spare for when these stations begin to fail. This will allow us to be more prepared to keep the system functioning as is.

Vicksburg is one of the two main pump stations in the system. Its control panel is aging and in need of being replaced. This controls when the pump shut on and off, the sequence in which they work and various other functions. It would be beneficial to replace this before it fails. The other main pump station had its control panel replace earlier this year.

5.2 Future Projects

Dave Currance, the maintenance supervisor has expressed concerns about the Deenville pump station. This is an old pump station located in an area which gets a lot of grease and debris through it. This has taken a toll on the station and is now needing upgraded. This is also noted in the LTCP.

The Island Ave pump station is also in need of being replaced. I do not know much about it, so more investigation will be required, but it is listed in the LTCP and I believe it is crucial to keep the pump station operating effectively.

APPENDIX A

Manhole / Line Maintenance Check List

Manhole	Street	Storm(St)/ Sanitary(S)	Grease?	Roots?	Rags/ Debris	Date	Crew	Report Need
C1.1		ST or S	Y / N	Y / N	Y / N		Kevin / Brian	Y / N
C1.2		ST or S	Y / N	Y / N	Y / N		Kevin / Brian	Y / N
C1.3		ST or S	Y / N	Y / N	Y / N		Kevin / Brian	Y / N
C1.4		ST or S	Y / N	Y / N	Y / N		Kevin / Brian	Y / N
C1.5		ST or S	Y / N	Y / N	Y / N		Kevin / Brian	Y / N
C2.1		ST or S	Y / N	Y / N	Y / N		Kevin / Brian	Y / N
C2.2		ST or S	Y / N	Y / N	Y / N		Kevin / Brian	Y / N
C2.3		ST or S	Y / N	Y / N	Y / N		Kevin / Brian	Y / N
C2.4		ST or S	Y / N	Y / N	Y / N		Kevin / Brian	Y / N
C3.1		ST or S	Y / N	Y / N	Y / N		Kevin / Brian	Y / N
C3.2		ST or S	Y / N	Y / N	Y / N		Kevin / Brian	Y / N
C3.4		ST or S	Y / N	Y / N	Y / N		Kevin / Brian	Y / N
C3.5		ST or S	Y / N	Y / N	Y / N		Kevin / Brian	Y / N
C3.6		ST or S	Y / N	Y / N	Y / N		Kevin / Brian	Y / N

*Report only needed if work is done to manhole or line.

APPENDIX B

CITY OF BUCKHANNON SANITARY DEPARTMENT
SEWER MAINTENANCE/ INSPECTION REPORT
LINES AND MANHOLES

Date:	Time:am / pm
Name of Employee Reporting:	
Personnel Involved:	

Location of Manhole/ Line Checked:
Reason for Inspection/ Maintenance:
Conditions/ Information:
Inspection/ Maintenance Work Performed:
Follow up Action (If needed):
Check again within (circle one): <ul style="list-style-type: none">• 1 month• 3 months• 6 months• 1 year• 2 years• 3 years or greater

Employee reporting’s Signature: _____ Date: _____

Superintendents Signature upon Receiving: _____ Date: _____

APPENDIX C

Sewer Department Proposed Pay Rates

Certifications / Practice		Legend	
Certifications	Base Pay/Pay Increase	Available to	Color
Class 4 Operator	24 per hour	Line Crews	
Class 3 Operator	22 per hour	Maintenance Crew	
Class 2 Operator	18 per hour	Lab Crew	
Class 1 Operator	16 per hour	All Crews	
Journeyman Electrician	18 per hour	Maintenance/ Line	
Master Electrician	22per hour		
Welding Certificate	1.50 per hr increase		
Class A CDL	1.50 per hr increase		
Class B CDL	1.00 per hr increase		
2,000 hours on Excavator	1.00 per hr increase		
2,000 hours on Loader	0.50 per hr increase		

Positional Base Pay	
Chief Operator	25 per hour
Supervisors	19 per hour
Crew Leaders	17 per hour

Pay Based on Experience	
Years Worked	Base Pay
Starting Wage	12 per hour
5	13 per hour
10	15 per hour
15	18 per hour
20	20 per hour
30	23 per hour

***Pay not to exceed 27 dollars per hour**

APPENDIX D

#	LOCATION	DESCRIPTION	PIPE SIZE	QUANT	UNIT PRICE	EST COST	SCOPE DIFFICULTY	PRIORITY
1	N SPRING ST (Completed)	Upgrade failing sewer	10"	650	\$75	\$48,750	MAJOR	A-HIGH
2	NORTH LOCUST STREET	Upgrade failing sewer	8"	800	\$80	\$64,000	MAJOR	A-HIGH
3	TAYLOR ST	Relocate, reconnect, upgrade	8"	2,000	\$90	\$180,000	MAJOR	A-HIGH
4	GUM STREET/ CHESTNUT	Relocate, reconnect, upgrade	6" & 8"	2,500	\$80	\$200,000	MAJOR	A-HIGH
5	UPPER SHAWNEE - ABOVE ROHR	Relocate, reconnect, upgrade	8"	1,800	\$80	\$144,000	MAJOR	A-HIGH
6	JAWBONE RUN AT EAST MAIN	Relocate, upgrade	21" & 24"	650	\$160	\$104,000	MAJOR	B-MEDIUM
7	JAWBONE RUN AT MEADE ST	Relocate, upgrade	21"	850	\$140	\$119,000	MAJOR	B-MEDIUM
8	CAMDEN & BROOKE @ WVWC	Reverse flow to new PS	8"	1,500	\$95	\$142,500	MAJOR	B-MEDIUM
9	LOWER DR	Relocate, reconnect, upgrade	6" & 8"	1,200	\$80	\$96,000	MEDIUM	B-MEDIUM
10	ALLEYS E MAIN TO LUMBER	Relocate, reconnect, upgrade	6" & 8"	900	\$75	\$67,500	MEDIUM	B-MEDIUM
11	MORGAN ADDITION @ RIVER AVE	Upgrade	8"	250	\$95	\$23,750	MEDIUM	B-MEDIUM
12	E LINCOLN & THIRD AVE @ FLORIDA	Eliminate failing sewer	8"	250	\$90	\$22,500	MEDIUM	B-MEDIUM
13	CITY HALL TO E MAIN ST PS	Upgrade	8"	400	\$85	\$34,000	MEDIUM	B-MEDIUM
14	KEPNER/ SWISHER/ IDEN LANE	Complete upgrade	8"	800	\$75	\$60,000	MINOR	B-MEDIUM
15	SOUTH FLORIDA ST	Repairs, evaluate	8"	500	\$95	\$47,500	MINOR	B-MEDIUM
16	MEADE ST	Repairs, evaluate	8"	500	\$95	\$47,500	MINOR	B-MEDIUM
17	GATE ST to N FLORIDA	Improve hydraulic performance	8"	1,500	\$80	\$120,000	MAJOR	C-LOW
18	SOUTH CAMDEN AVE	Upgrade old line	8"	1,600	\$95	\$152,000	MEDIUM	C-LOW
19	SOUTH RANDOLPH ST	Upgrade old line	8"	1,600	\$95	\$152,000	MEDIUM	C-LOW
20	SOUTH POCAHONTAS ST	Upgrade old line	8"	1,600	\$95	\$152,000	MEDIUM	C-LOW
21	GASTON ST	Upgrade	8"	1,200	\$85	\$102,000	MEDIUM	C-LOW
22	LOWER WEST LINCOLN	Eliminate parallel line	8"	800	\$95	\$76,000	MEDIUM	C-LOW
23	FRANKLIN ALLEY	Upgrade	8"	400	\$85	\$34,000	MEDIUM	C-LOW
24	WEST VIEW ACRES RECONNECT	Reconnect customers	6"	600	\$75	\$45,000	MINOR	C-LOW
						\$2,234,000		

TABLE

TABLE 16 PROPOSED STORMWATER PROJECTS

#	LOCATION	DESCRIPTION	PIPE SIZE	QUANT	UNIT PRICE	EST COST
1	NORTH SPRING ST (Completed)	Upgrade and separate storm from sanitary from Main St to RR	10"	800	\$60	\$48,000
2	GUM ST	Upgrade and relocate storm sewer on Gum St with connections at Kepner, Myrna, and Chestnut	18" - 36"	800	\$160	\$128,000
3	TAYLOR ST	Upgrade and relocate storm sewer from Kanawha St to river	18" - 30"	1,200	\$160	\$192,000
4	LOWER JAWBONE	Complete system upgrade from Maple St to the river	60"	250	\$400	\$100,000
5	RITCHIE ST	Complete system upgrade from Kanawha St to the river	18"	500	\$250	\$125,000
6	MID JAWBONE	Upgrade and relocate storm sewer from Boggess St to Maple St	36" - 42"	600	\$200	\$120,000
7	RUNOFF REDUCTION MEASURES	Institute and implement runoff reduction measures throughout the city. Based on cases to be done	NA	20	\$12,000	\$240,000
						\$953,000

Appendix F

TABLE 15 PROPOSED PLANT & PS PROJECTS

#	PROCESS UNIT	DESCRIPTION	EST COST
			MATERIALS
1	UV DISINFECTION (Completed)	Complete upgrade to new UV units	\$130,000
2	PRIMARY TREATMENT	Upgrade debris removal system	\$250,000
3	SERVICE WATER SYSTEM	Upgrade pumps and distribution system	\$150,000
4	PLANT GENRATOR (In Progress)	Replace with greater capacity	\$250,000
5	PS GENERATORS	Replace and upgrade	\$750,000
6	ELIAS PS (Completed)	Replace control panel	\$20,000
7	VICKSBURG PS	Replace control panel	\$20,000
8	DEANVILLE PS	Upgrade PS & force main	\$45,000
9	ISLAND AVE PS	Upgrade pumps, controls, and force main	\$45,000

10	EMERGENCY EFFLUENT PUMPS	Evaluate and upgrade	\$75,000
11	PS TRANSFER SWITCHES (In Progress)	Install at smaller pump stations	\$200,000
12	FORCE MAIN TO PLANT	Evaluate and replace	\$750,000
13	FLOW EQUALIZATION BASINS	Evaluate and install	\$1,500,000
14	PLANT BACK UP PUMPS	Add to inventory	\$75,000
15	PS BACK UP PUMPS (In Progress)	Add to inventory	\$150,000
16	SLUDGE PUMPING SYSTEM	Upgrade pumps	\$80,000
17	CLARIFIERS	Center baffle in clarifier #2	\$30,000
			\$4,390,000

B.2 Possible Action/Revisit Mini Excavator Bid Opening – Low Bid did not meet specifications -
Ethan Crosten reported that after a review of the bids and the equipment offered, the CAT equipment that was proposed in the bidding process best met the required specifications with the best servicing options.

Motion to approve the purchase of the CAT Mini Excavator for a cost of \$71,876 based on it meeting the specifications and providing better servicing options was made by Frye/Loftis. Motion carried.

MINI EXCEVATOR BIDS COMPARISION			
SPEC	CAT (\$71,876)	JOHN DEERE (\$69,000)	TACKUECHE (\$69,621)
Model	305 07A	50G	TB260CR
Quick coupler	yes	yes	yes
Auxiliary lines provided	yes	yes	yes
Max 12" tail swing	yes, approx 9"	yes, approx 4"	unknown
min digging depth 12'	12"	12' 7"	12' 9"
2,500 lb lift @ 14'	yes	,	
cab with LCD monitor	yes	yes	unknown
44 horse power engine	yes, 45 hp	no, 35.9	yes, 47.4 hp
bolt on cutting edge	yes	unknown	yes
2 ft bucket	yes	yes	yes
thumb attatchment	yes	yes	yes
weight (min 11,500)	12688	11349, below spec	12509
availability date	TBA	Early February	Approximately Feb. 1st
service center distance	37 miles, bridgeport, wv	18 Miles East of Buckhannon	main location pittsburg
Rubber tracks	yes	yes	yes
Long stick	yes	yes	yes
warrenty	24 month / 2000 hr	24 months	24 month, 2000 hr
payments	TBD	3.5% for 60 months	3.50% for 60 months
references provided	yes	yes	not given

C. Board Members Comments and Announcements - None

D. Adjournment

Motion to adjoin the meeting at 8:26 a.m. was made by Frye/Loftis. Motion carried.

Mayor Robert N. Skinner III _____

City Recorder Randall H. Sanders _____