

**LOWER PAXTON TOWNSHIP  
AUTHORITY MEETING**

Minutes of Township Authority Meeting held September 27, 2016

A meeting of the Lower Paxton Township Authority (LPTA) was called to order at 7:13 p.m. by Chairman William C. Seeds, Sr., on the above date at the Lower Paxton Township Municipal Center located at 425 Prince Street, Harrisburg, Pennsylvania.

Authority members present in addition to Mr. Seeds were: William L. Hornung, William B. Hawk, Gary A. Crissman, David Blain, Robin Lindsey, and Justin Eby. Also in attendance were George Wolfe, Township Manager, Steve Stine, Authority Solicitor, William Weaver, Authority Director; Tim Nolt, Authority Engineer; Jim Wetzal, Authority Operations Manager; Scott Crosswell, Jeff Wendle, and Alton Whittle, GHD; and Watson Fisher, SWAN.

**Pledge of Allegiance**

Ms. Lindsey led in the recitation of the Pledge of Allegiance to the Flag

**Approval of Minutes**

Mr. Crissman made a motion to approve the August 23, 2016 business minutes of the Sewer Authority. Mr. Hawk seconded the motion. Mr. Seeds call for a voice vote and a unanimous vote followed.

**Public Comment**

No comments were provided.

**Board Members' Comments**

No comments were provided.

**NEW BUSINESS**

Resolution 16-11; authorizing the submission of a grant  
application to the Commonwealth Financing Authority

Mr. Nolt noted that Resolution 16-11 authorizes the Authority to submit a grant application to the Commonwealth Financing Authority (CFA) to seek funds under the Small Water and Sewer Program. He noted that this was discussed briefly during the August meeting. He noted that the grant amount is for \$425,000.

Mr. Crissman questioned when is the application due, what is their review time, and when will the CFA respond to us. Mr. Nolt answered that the application is due October 31, 2016

and based upon discussions with Sandy Orth from the Department of Community and Economic Development, she is thinking that the CFA meets January or February for a Board meeting where they will review applications and make the awards. Mr. Crissman questioned when the announcements will come for the grant approval. Mr. Nolt answered that it is made during their Board meetings so it could be as early as January or February of 2017. Mr. Eby noted with their programs, it will most likely be funded. Mr. Crissman noted that we will not have to obligate the monies on or before June 30<sup>th</sup>. Mr. Eby noted that their budgets run July through June. Mr. Crissman questioned if we have to obligate by June 30<sup>th</sup>. Mr. Eby suggested that the contract would start July 1st for their program as that is what experience he has had with them. Mr. Crissman explained that he wanted to make sure we can complete the obligations within the time frame.

Mr. Stine noted that the CFA runs differently than the rest of the Commonwealth. He suggested that the grants could be for more than one year. Mr. Crissman noted that some government agencies will do extensions. Mr. Weaver noted the last time the Authority was awarded a CFA grant it was in January and February and they did not award until the May meeting.

Mr. Crissman noted that he does not want to get the Authority in a situation where we can't accomplish what we want to do.

Mr. Eby questioned what project this is for. Mr. Nolt answered that it is for Trunk A that is northwest of the Sheetz on Linglestown Road.

Mr. Seeds noted that there is a cost for this grant. Mr. Nolt answered that there is a \$100 grant application fee and a 15% match for the grant.

Ms. Lindsey questioned if we would have a year to use the funds. Mr. Stine answered that no one knows. He noted that we will find that out when the grant is awarded.

Mr. Crissman made a motion to approve Resolution 16-11, authorizing the submission of a grant application to the Commonwealth Financing Authority. Mr. Blain seconded the motion. Mr. Seeds called for a voice vote and a unanimous vote followed.

Resolution 16-12-1 through 16-12-12 authorizing condemnation of permanent and temporary construction easements for the PC-4A project

Mr. Weaver noted that you have seen these resolutions a few times before, noting that Resolutions 16-12-01 through 16-12-12 is for the replacement of a portion of sanitary sewers

including private sewers as part of our Corrective Action Plan (CAP). He noted that it is necessary to acquire the permanent and temporary construction easements to comply with the CAP. He explained that he has provided a list of 12 property owners who have not responded to the first and second notices and it is staff's recommendation to approve these resolutions to allow the solicitor and manager, as they deem appropriate, to contact the owners to acquire the easements.

Mr. Crissman noted that he is surprised to find the one name on the list. Mr. Weaver responded that they did receive the paper work for a few on the list today. He noted that he did receive the signed documents from the one person who is requesting compensation. He noted that an appraisal was completed and she wanted \$5,000 for the easements and that was within the limits of the appraised value. He explained that she claims that she will donate the funds to the Friendship Center Scholarship Fund. Mr. Crissman noted that is excellent.

Ms. Lindsey questioned why people don't reply. Mr. Weaver answered that he never asked. Mr. Stine noted, in some instances, the property is vacant. Mr. Eby questioned if rental properties come into play. Mr. Stine reply no as they are typically owner occupied, they could not pay their mortgage anymore and just left. He noted as a result, there is no one around to respond. Mr. Weaver noted that many of the projects involve over 300 properties but this one only involves about 100 properties.

Mr. Crissman made a motion to approve Resolution 16-12-01 through 16-12-12 authorizing the condemnation of permanent and temporary construction easements for the PC-4 project if needed. Mr. Blain seconded the motion. Mr. Seeds called for a voice vote and a unanimous vote followed.

Resolution 16-13; Authorizing the Township Manager and Director to acquire construction easements by agreements based on appraised fair market value

Mr. Weaver noted that the Authority has portions of its sewer that it has to replace as part of the Corrective Action Plan. He noted that occasionally the Manager or I have to contact these owners and negotiate the acquisition in lieu of not condemning the property. He noted that he will get a fair market appraised value and then offer it to the property owner. He noted that Mr. Stine recommended that the Authority have a resolution in place adopted by the Board that delegates this authority to the Manager and himself.

Mr. Crissman questioned Mr. Weaver if he sits down with those people or do you prepare a letter and make contact. Mr. Weaver answered that he and an engineer meets with them. He noted that occasionally we may have to do this for a residential property, but in most cases it involves business or commercial properties that know that there is a value for the easements. He noted that they want to see the appraisal and sometimes they want other things done and if we can do it, we try to do so.

Mr. Crissman made a motion to approve Resolution 16-13 that authorizes the Township Manager and Director of the Authority to acquire construction easements by agreement based on the appraised fair market values. Mr. Blain seconded the motion. Mr. Seeds called for a voice vote and a unanimous vote followed.

Approval of Temporary Construction Easement and Maintenance  
Agreement with the Dauphin County Technical School

Mr. Weaver noted that the Township and Township Authority are in the process of constructing a vehicle wash facility as part of the improvements being done at the Public Works facility. He noted that a sanitary sewer line is required to be connected on property outside of the Township's. He noted that the property is owned by the Dauphin County Area Vocational-Technical School Authority. He explained that he met with their solicitor, had the agreement signed by their Authority, and it is in the packet for the Authority's signature.

Mr. Crissman made a motion to approve the Temporary Construction Easement and Maintenance Agreement with the Dauphin County Area Vocational-Technical School Authority. Mr. Blain seconded the motion. Mr. Seeds called for a voice vote and a unanimous vote followed.

**STRATEGIC PLANNING**

Review of the Beaver Creek/Paxton Creek  
Alternatives and new sewer rate projections

Mr. Seeds noted that we will discuss the user rates and extra storage options with Mr. Wendle and Mr. Whittle from GHD.

Mr. Wendle noted that this is an extension from the meeting that we had in May of 2016 where a number of questions were brought up. He noted that we have, over the past several years, been saying that as the cost of replacement and rehabilitation increase, storage is something that you should look at from a cost standpoint. He noted during the May 2016

meeting he did a present worth cost analysis which Mr. Blain had indicated was nice but it didn't tell us too much for how it would impact rates and what the total dollars were. He noted that he will be able to show what he has projected up to the end of the Corrective Action Plans for what the total dollars would be with the updated plan for the repair and replacement, inflating the costs 3% a year based on historical construction cost index for the past 20 years. He noted that he has also taken into account some additional costs that are being paid out of the bond issues and some additional inspections that were done for roads. He noted that we have tried to temper the costs for roads as it has been getting a little out of control by rebuilding the roads. He explained that he came up with a reasonable alternative and basically has projected out to the future, to see on an inflated basis, what it would be in real dollars.

Mr. Wendle noted that he wants to compare the two options of continuing replacement with a small storage at the end or store now to meet the requirements of the plan.

Mr. Wendle noted that slide one is a reminder of the program requirements noting that in Spring Creek we have to continue to monitor flows and perform I/I to meet the limits of the Intermunicipal agreement between Lower Paxton, Susquehanna and Swatara Township Authorities. He noted that we assumed, to be conservative in our projection a future mini-basin replacement will be required. He noted that we are meeting the flow requirements at this time in Spring Creek but we haven't had any storms recently that have totally convinced us that we are okay. He noted that he has included this for future programming in the event we have to do something.

Mr. Wendle noted for Paxton Creek we have to eliminate overflows by 2022. He noted that most of them have been eliminated but the Township continues to contribute to overflows in the interceptor downstream in Susquehanna Township. He noted that our contribution to those, which would be anything over the agreed upon limit to send to Susquehanna Township, would need to be taken care of. He noted that we assume that it is 10.6 mgd peak hourly flow. He noted that we need to reduce the hydraulic overload by 2027 which means that within both the interceptor downstream and all of the interceptors and collection systems in the Township, we need to have enough capacity that even under surcharge conditions, and accounting for future growth, that we have reduced hydraulic overloads to the point where we can continue to grow as the zoning plan projects and that we have enough capacity in the sewers not to overflow. He

noted that the surcharging has to be confirmed with modeling and field measurements which Mr. Whittle will speak to in a little bit.

Mr. Wendle noted for Beaver Creek, it is the same thing, except that the plan calls to eliminate overflows by 2028 with the reduction of hydraulic overloads being completed by 2033. He noted that it is just within the Township as per the requirements with Swatara Township.

Mr. Wendle noted that we have revised construction costs estimates, coming up with new metrics based on the most recent projects in Susquehanna and Lower Paxton Township. He noted that it can't include material takeoffs for projects but he came up with metric that had good indicators of what the programs costs would be. He noted that it includes linear feet in the streets, in the right of way, and the amount of paving. He noted that he was able to produce good estimates using it to mirror the kinds of costs that we are seeing now.

Mr. Wendle noted that the hydraulic models that were done to eliminate overflows in Beaver Creek in 2028 is not achievable without storage, and in Paxton Creek it is not achievable for the Susquehanna Township portion without storage. He noted that the question becomes when the storage gets built. He noted that we have looked at the inflated dollars, the impact on rates, and added the Spring Creek basin to offset any degradation in flows that may occur.

Mr. Wendle noted that you are faced with limited options as the Department of Environmental Protection (DEP) turned down the Acti-Flo. He noted that we had a Trickling Filter designed and ready to go but South Hanover Township would not allow us to do. He noted that we looked at BIO-ACTIFLO at the Swatara headworks which they don't want to do. He noted that we considered low pressure systems but it was not acceptable even though you would reduce the flows, you would have people on pressure systems with the existing people on gravity systems. He noted that the final option is total rehabilitation and replacement which is what we have been doing. He noted that the current option is rehabilitation and replacement with minimal storage noting that this was delegated towards the end of the plan to be able to accommodate future growth. He noted that the other option is to build storage earlier and we will look at how that impacts the rates.

Mr. Wendle noted that Mr. Whittle will discuss what we did in setting up a modified program.

Mr. Whittle noted that the two options that GHD looked at in terms of rates are an updated program or an extra storage option. He noted that we could fine tune this with additional options in the future.

Mr. Whittle noted that the first is the current program which is the modified one that includes the new costs and some results from the modeling. He noted that it would include doing any basin that is over 1,000 gallons a day per EDU regardless of costs to include interceptor upgrades and construct smaller storage at the end. He noted that this would be the same for both Paxton and Beaver Creek basins. He noted the other option that they considered is the Extra Storage Option, noting that they would only address a mini-basin that is directly contributing to an overflow or that is cost effective. He noted that we would need to draw a line for what is cost effective for removal and deal with all the rest as storage. He noted that it would involve some interceptor upgrades and a larger storage downstream.

Mr. Seeds noted if we had a major rain event would we be storing it and putting it in tanks, what would be the average amount of time that flow would be in the tanks before it would be released. He questioned if we would have to treat it. Mr. Whittle answered that you would not have to treat it. Mr. Wendle noted that you would mix it, noting that he has four or five million gallons tanks in Hatfield that have a surface mixer to keep the solids suspended. Mr. Seeds questioned if you would need aeration. Mr. Wendle answered no.

Mr. Whittle noted that we looked at the current high storm event that you had in your past history and the storage for that would be only a day or two. Mr. Seeds questioned if within two days it would be released. Mr. Whittle answered that it is based on the largest storm event that was not excused. Mr. Weaver suggested that we would work with Swatara to see how they would want to release it as we could do it at any speed we want to. He noted for 99% of the storms, we could take a week or two weeks to release it, but maybe once every ten years you get a huge event, that at 9 million gallons you may have to do it right away because you have another storm coming behind it.

Mr. Seeds questioned, when the tanks are built would they have large motors that would stir it continuously regardless of the level of the tank. Mr. Wendle answered yes. Mr. Seeds questioned how much electric that would use. Mr. Whittle answered that it would be minimal based on your budget as you are only talking about mixing for a few days of the year. He noted if you had the once every ten years storm event, the largest one we have seen on record, the most

you would be storing would be for a day and a half or two days. Mr. Weaver noted that we had three overflows last year and we have had some of the worst wet weather we have seen in a long time. He noted that they could sit for a year and not be used. Mr. Whittle noted for most events you would only be skimming the top flow for a couple of hours which you wouldn't want to send to Swatara or Susquehanna Townships.

Mr. Seeds questioned if they would need to be cleaned periodically. Mr. Wendle answered that there is a pipe that goes around the circumference and because the fluid is mixed, when it is drained there would be some sediment. He noted that the jets from that pipe wash down to the middle and it will then drain out. He explained that he added a water storage tank to hold this water as you don't want to have to pipe it in as you need a large high flush rate for a short period of time. He noted that you don't want to construct a giant water line to the storage tank, but the tank would hold about 25,000 to 30,000 gallons.

Mr. Hornung questioned if it would have to be heated in the wintertime. Mr. Wendle answered no as you will only have it in storage for a day or so and it would be mixed and drained. He noted that it could get a little icy at the bottom after the wash down but no one will be in the tank.

Mr. Eby questioned if it could be put underground. Mr. Wendle answered that some of the tanks in Susquehanna Township will be open tanks noting that it is a requirement of the Conservancy where they will be located, but in Lower Paxton Township's case if you build them on Conway Road you would want them underground.

Mr. Seeds questioned if Susquehanna Township will build storage. Mr. Wendle answered that they purchased the land to build it. He noted when the site was sold to Susquehanna Township, the person who sold it would only do so if he could get a tax write off for the conservancy. He noted that the conservancy controls all of it and the area where they are allowed to build is fairly limited, but it was set forth that they would be open tanks to serve Lower Paxton and Susquehanna Townships. Mr. Whittle noted that he had a slide to show that location.

Mr. Whittle noted that the modified program will require storage at the end and with the results from the hydraulic modeling and the removal rates you are currently getting, the program is getting to be cost prohibitive, but it will address all the I/I sources and you will see significant street improvements. He noted that the extra storage option would provide for more storage early on and not doing as much rehab. He noted that it will meet the required storage that will be

needed only it would be larger. He noted that you can maintain the rate increase of less than \$10 a quarter and you would be using storage to address cost prohibitive projects and could utilize staff for yard restoration. He noted that the projects that are close to \$9 per gallon to remove, noting that it is \$50 a gallon towards the end of the project, you would not have to deal with them. Mr. Weaver noted that we would only be doing one project per year instead of four and it would provide more control over the restoration projects.

Mr. Whittle noted that anything on slide 8, whether it is pink or yellow is the current program. He noted that the projects at the bottom are below 1,000 gpd per EDU currently or close to it. He noted for the extra storage option he is projecting that you would only do the ones in pink, adding one extra basin for each project, in this case picking PC-3, one of the bigger basins as a future placeholder in the event the flows increased. He noted if you do storage earlier you would eliminate two thirds of the rehabilitation and it would also allow you to takeout the schedule longer, getting the pink basins done by 2022. He noted that it would slow down the pace and limit what your work is.

Mr. Whittle noted that we have the same slide for the Beaver Creek basin noting that anything highlighted is in the current replacement project but you would only have to do the basins in pink for the extra storage option. He noted that you would not have to do anything in yellow. He noted that it is all modeled for future growth and the selection of the basins is based upon the cost per gallon removal, but there are a couple that need to be done to avoid localized overflows. He noted what is good with the system is that you are conveying your flows to the interceptors as it is good, and there is no need to upgrade any capacity in the system.

Mr. Weaver noted that this is the most crucial slide as Mr. Wendle has been saying for years that it would be cost effective to do storage and now you can see it in writing. He noted if you look at the yellow at \$6 to \$15 range it is not cost effective anymore. He noted that we have to do storage anyhow but we could make it bigger and save all those neighborhoods from replacing sewers that are not cost effective. He noted that we did all the low hanging fruit projects so now we are getting into neighborhoods that are not that bad but they are not at the level where they meet the criteria of 1,000 gpd per EDU. He noted that you have to do something.

Mr. Seeds noted, at some point those pipes will deteriorate to the point that...he noted if they are 25 or 50 years old, they will deteriorate so they will have to be replaced. Mr. Weaver noted that Mr. Wendle had that calculation.

Mr. Whittle noted that slide 10 shows the program option timelines. He noted that Beaver Creek is in green and Paxton Creek is in red. He noted that the top shows the modified program as you are currently doing with the newer costs and the bottom one shows what the timeline would be if you do extra storage. He noted once you start to pay off the bonds and they drop off, instead of lowering your rates significantly you can use the rate difference to address future work. He noted that the system will eventually deteriorate but the pace for how you would be doing it, by using storage earlier, would save money unless you get to the maintenance stage providing for maybe one contract a year.

Mr. Wendle noted when the debt service is retired in 2039 that would amount to about \$5,600,000 a year that will come free. Mr. Crissman noted that is providing we don't borrow more money. He noted that we will have to borrow more money but not until after 2039. He noted that he built an extra basin into each one to try to be conservative. He noted for the Paxton Creek basin chart where we are saying that we are finished in 2022, in that option we threw in basin 3-E which is Clermont to be done before 2027 in case we had to. He noted if we reduce the hydraulic overload in 2022 or 2027 we are done for a while. He noted that we know in the future we will have to do stuff but let us pay off some of this stuff.

Mr. Whittle noted that rather than Beaver Creek going out to 2033, by 2028 you would be done with your rehab and at some later date you would keep up the maintenance of the system. He noted that it is not as dramatic for Paxton Creek as you are pretty close, but it would take you to 2022.

Mr. Whittle noted on slide 11, the bottom shows the inflated costs for the modified costs at \$258,300,000 but the extra storage option is \$138,400,000 from 2016 on. Mr. Weaver noted that it is a difference of \$120,000,000. He noted that the chart shows the average cost per GPD Peak Flow Removal and when we discussed the \$2 or \$3 per day it was 2007 costs, but the ones on the charts are inflated costs. He noted when you get past the first section of basins the costs go from \$5.92 gpd to \$7.81 gpd and to \$16.15 gpd, whereas if you deal with the low hanging fruit you have \$5.05 and \$3.33. He noted that the rate decreases at the very last basin that you

would do would be to the control basin which has a high return. He noted that is PC-IF in Forest Hills.

Mr. Weaver noted that DEP and Swatara Township have to approve this plan in Beaver Creek, but for Paxton Creek only DEP has to approve it. He suggested that Swatara Township does not have any control as the CAP has provisions for it and DEP would have to give the approval for the storage. He noted that the modified program is what we have to do, but the extra storage would be a new CAP that would have to be approved by DEP. He noted that Mr. Wendle stated that there is no reason why they should not approve it as it complies with all the rules and regulations. He noted that he does not see it as being a problem either although he sees many of these people at conferences such as Lee McDonald and they still believe that this is a band aid. He explained that we need to meet with DEP and Swatara Township. He noted that it has always been the thinking that it was a band aid, but when you look at Mr. Wendle's numbers it is more than a band aid it is a savings of \$120,000,000 that also has built in maintenance costs. He suggested that we can change those opinions when we show them the costs involved and how the maintenance program would work. Mr. Eby stated that you need to show the difference in the rates. Mr. Weaver noted that they don't care about that.

Mr. Seeds questioned if the \$90 million includes what we have done up to now. Mr. Whittle answered that it is how much we will spend between 2016 and 2023. Mr. Weaver noted that we have spent over \$100,000,000. He noted that the current principal balance on the bonds is \$98 million but we retired debt 15 to 20 years ago.

Mr. Blain questioned what the life expectancy of a storage unit is. Mr. Wendle noted that they are made up of concrete and it would be a long time. He noted that it would be more than 50 years. He explained that there would be maintenance for the equipment in the tank but not the tank itself. He noted that you would have to replace pumps at some point, but they are pumps that would only operate five to six times a year. He suggested that they should last pretty long.

Mr. Blain question what the average age of the pipes in the ground is that would be located near the storage. Mr. Weaver answered that it was built in 1970, asbestos cement. He noted that the original plan was to replace all the asbestos cement pipe, so you are getting a 50-year life on a concrete tank as compared to getting a 50 year life for a sewer as they still contend that the lifetime for a sewer is 50 years or longer. Mr. Wendle noted that it could be longer with PVC. He noted that those types of pipes don't have a great seal so in terms of deterioration, if

there was drastic deterioration in terms of how much extra water was getting in, it would be somewhere where the pipe would fail and you might have to go out and replace a section of pipe. He noted in general, he feels reasonably comfortable that will not get much worse than it is.

Mr. Blain noted the best laid plans sometimes don't go as planned so as long as you're saying that you feel very, very comfortable that the pipe in the ground, in five years, will not go into complete and utter chaos and that we have to dig it all up after putting in storage tanks, spending millions of dollars to do that. He noted that it worries him that whenever you talk about anything that is 45 years old in the ground, it is like a car. He explained that his car has 200,000 miles on it and it is running great but that is not to say that it won't blow up tomorrow as they can't guarantee things like the engine or anything. He noted that we are talking about millions of dollars, and it looks great on paper to say that we will save \$120,000,000 but in five or ten years from now he does not want to come back and say we have to replace all these pipes.

Mr. Weaver noted that the key point of this program is that DEP thinks it is a band aid. He noted that they don't like it so the difference in our program is that Mr. Wendle is going to show, going out, that you have sewers that are 50 or 60 years old and they will fail. He noted that they will fail at some point, but there is money in the program to do maintenance on the sewers every year; however, it doesn't start until 2039 when the \$5 million comes off. He noted that there is very low risk, assuming that for 50 years the sewers have been good and you need to go another 22 years.

Mr. Whittle noted that the storage option did have an extra basin, one of the larger possibilities in each basin. Mr. Wendle noted that it includes \$8.7 million for PC-3E. He noted that he feels very, very, very comfortable that if you build storage you will realize significant savings that will make it worthwhile to build storage. He noted that he does not believe that you will have a catastrophic event and have to do all the replacement to avoid it.

Mr. Weaver noted that you are up \$120 million so you will have a lot of sewers to do. Mr. Wendle noted if you had to get something out, we have accounted for that in both Beaver and Paxton Creeks, doing a whole other mini-basin to account for any deterioration that you have. He noted that he feels comfortable with that.

Mr. Hawk noted that \$120 million may be a major selling point to DEP. He noted that they have mentioned that they don't care for the plan, but they have always been in favor of tertiary treatment, and now we are going to go to storage, will that be a major stumbling block.

Mr. Wendle noted that the CAP that has been adopted has storage in it in Paxton Creek as at the end of the time period there were always plans to build storage. He noted, in order to be able to account for future growth, you will have to have something other than rehab, so storage has always been on the table with them. He noted, the last time he met with DEP, he talked about storage, and he questioned if he picked a design storm and we design for that storm, and their response was once every eight years we had a major storm event that happened, would it be an excused event and they replied yes they would consider that. He noted that he does not think that they are totally against storage especially if you say that you plan, in the future, that once the bond payments stop then the Authority would already be at a rate level to be able to renew the sewers. Mr. Weaver noted that they want to see the sewers replaced but they will have to accept storage as it meets all the regulations. He stated that he does not see how they can deny it.

Mr. Hawk questioned if it would be connected to Acti-Flo. Mr. Weaver answered that it will go back into the sewer as we are not treating it. He noted that they want to minimize new discharges and they want to stop it. He noted that you can't even get a discharge permit. He noted that there was a total maximum daily load that each tributary could take and when they first started doing this they were threatening not to allow anymore discharges.

Mr. Seeds questioned if this is for both Beaver and Paxton Creeks. Mr. Whittle answered that it is for both.

Mr. Seeds questioned what the \$63,100,000 stands for in the Extra Storage column. He noted that you added both numbers together to get \$138,400,000. He noted if you build it in 2024 to 2028 it would be \$63,100,000. Mr. Whittle noted that we are talking about moving the storage up to 2028. Mr. Seeds noted that we would be doing more I/I before that period of time. He questioned what that would cost. Mr. Whittle answered that we would not be doing any here. Mr. Seeds noted if we don't build storage before 2028 you will be doing I/I. Mr. Weaver noted that it is included in that number. Mr. Wolfe noted that the additional I/I work is in 2016 to 2023 block at a cost of \$75,300,000. Mr. Wendle noted that there will be some between 2024 and 2028.

Mr. Whittle noted that slide 12 shows how we are scheduling each year trying to balance these out so you have one project a year. Mr. Weaver noted that slide 12 shows what the exact dollars are for storage. Mr. Whittle noted that we are saying that once you get to a certain point you will not be removing much, but you are not seeing I/I reduction, so you are getting very little

return on your dollars once you get out beyond the next five to eight years. He noted that there is a better way to use those dollars by just worrying about those four or five days a year when you have a problem, noting that you are dealing with the big storm event.

Mr. Seeds noted that eventually we have to do the storage. Mr. Whittle answered yes. He noted that the question is where the cut off is and how much are we willing to pay per gallon to remove versus when do we start storing it. Mr. Whittle noted if we did Paxton Creek, going out with the current program using the modified costs, at the end you would have 3 million gallons of storage. He noted that it would cost \$14,800,000 to store 3 million gallons that would equate to 7 million of peak flow that would be extracted at the storm event. He noted that it would not store more than an hour at that point but the cost for removal is \$2.11 for the peak flow that you are taking out of the sewer. He noted that there was confusion as to the general rule of thumb for how much it would cost to build storage based on the volume that is different than the cost of what you are addressing in terms of peak flow. He noted that the cost to build the storage for 3 mgd at \$14,800,000 is \$5 per gallon of storage. Mr. Wendle noted that we are showing the equivalent for the metric that we've used; when you do a mini-basin we have always looked at how much peak flow is removed and what the rate is per gallon per day and what we are saying in Paxton Creek is, at the end we would have to remove 7 million gallons a day of peak flow, and if we would have done rehab to do that it would be the dollars for the rehab divided by seven mgd. He noted if we build storage at \$14 million to remove a peak flow or to handle a peak flow of 7 mgd you would divide \$14.8 by seven to get \$2.11. He noted for the extra storage if we did it in 2022 we would have to build 7 million gallons costing \$10 million gallons accommodating at a cost of \$1.85. He noted if you want to compare it to the mini-basin costs per gallon per day that we are seeing going up to \$5 or \$16, those numbers are the inflated numbers and they compare to the mini-basins.

Mr. Weaver noted that it is comparing apples to apples. He noted that he and Mr. Hilson were attending conferences where they stated that it is \$5 to \$6 a gallon for storage and Mr. Wendle was telling us \$2 to \$3 a gallon for storage. He noted that Mr. Whittle finally explained this to us and now we understand. He noted the rates that he saw in Maryland were \$5 a gallon but it was for construction costs.

Mr. Whittle noted that the difference between a 3 million gallon storage tank and a 7 million gallon storage is only about \$4 million. He noted the cost to build a bigger tank is not that much more.

Mr. Blain noted if you can sell this plan to DEP then you are amazing. He noted that he is really skeptical that they will buy this plan. He noted the bottom line is that you still have pipe in the ground that is almost 50 years old.

Ms. Lindsey noted if you have a resident that knows that their pipe is 50 to 60 years old and they have friends in the Township who pipes were 50 to 60 year old but have already been replaced, they will start asking questions why their pipe was not replaced. She noted that they will say that their sewer bill is going up but you are not replacing their sewer; what do you tell them. Mr. Whittle answered, once you look at the chart for the rates if we did everyone laterals that will be happy that we did not do theirs. Mr. Weaver noted that Mr. Stine stated that there is no legal requirement to replace someone's private sewer if it is not in a selected mini-basin. He noted that they need to be part of a program.

Mr. Seeds noted when the day comes that we tell people that we are done replacing private sewers then you will hear them because they will say you did my neighbors for free and now you are saying that I have to pay to get my own done. Mr. Weaver noted that we get 15 to 20 calls a year that they want their lateral done. He noted that the program is so big and many times they were in the program. He noted that we will have to change the program when you adopt this new one because it will shrink who will qualify for it.

Mr. Blain questioned if you plan to go to DEP with an assessment of the current pipe situation for what you plan to keep in place until 2039 or do you plan to say that we televised it, looked at it, and we tested the integrity of the pipe looking for leakages and roots in the system. Mr. Wendle answered no. Mr. Whittle noted that is where the maintenance will come in the future. Mr. Blain noted to sell this plan, he suggested that you would have to provide an assessment for the current situation with the areas that you plan not to replace the pipe for where you will do the storage. He noted otherwise he does not see them buying it.

Mr. Hornung noted that we are going to replace the pipe but it will be 20 years later. He noted that we are not saying that we will never replace it, we are just pushing the date back 20 years.

Mr. Wendle noted that it would be 17 years and the flows have not deteriorated since we started looking at this in 2000. He noted that we have been doing this for 17 years. He noted for Beaver Creek, from 2028 that would be 11 years so it will not deteriorate that much and one of the things is when we did the mini-basins, we were talking about mini-basins that had five, six, and ten thousand gallons per day per EDU. He noted those basins that we are not doing are down around 1,300 and 2,000 so there is not much to get out. He noted that he does not believe, based on how these basins have performed, that they will deteriorate to a point where it couldn't be something we could handle and still save a whole bunch of money.

Mr. Whittle noted in Paxton Creek you have removed vertically all of your overflows as of today. He noted what you haven't resolved is how much peak flow goes down the Susquehanna Interceptor. He noted that it is the same for Beaver Creek as it is more your Intermunicipal agreements that are holding you back from this program than it is actually hydraulic overloads and overflows within your Township. Mr. Wendle noted that there are still hydraulic overloads and overflows that are holding you hostage. Mr. Whittle noted the key if is you are able to hold it so that you do not go over your IMA's.

Mr. Blain questioned if this plan takes into account growth in the system. Mr. Wendle answered yes. Mr. Blain noted when 2039 comes around, it is not like all of sudden the pipes that were delayed will all magically be replaced. He questioned how long forward from 2039 will it take to replace the pipe. Mr. Wendle noted that you don't look at it that way, noting that we will say that we will replace everything. He noted that you would monitor your flows over that time period and if your flows aren't deteriorating you could replace it at a very slow rate. He noted that you could use the money to reduce rates or you could say we are going to spend \$2 million a year on replacing pipes and pocket the other \$3.5 million. He noted in 2039 you will free up \$5.6 million that you have already built into your rate structure and it would free up money to start replacing the pipe at a regular basis. He noted how much you replace each year would depend on your experience between 2022 and 2039.

Mr. Weaver noted that the philosophy that we had from the beginning was build a treatment plant and then replace the sewers over 50 years. He noted that due to a language in a regulation they did not like Acti-Flo, and then we couldn't do the treatment filter, but if he is DEP he would love this idea. He questioned how you get them to understand that. He noted with the treatment we solved the overload and overflows right away. He noted that we could have

solved this 20 years ago as Mr. Wendle had a plan to do it and DEP said no. He noted that they, the people who work for DEP, are trying to protect the environment, why aren't they doing this as it is the same theory by storing all this, now we've solved the problem and they should be thrilled. He noted that he will hammer that point that we are putting in this big tank and you never have to worry about Lower Paxton again, and you can go after someone else now as there is no overload and we have capacity for ultimate growth. Mr. Wendle noted that they have approved this in many places as there are several storage tanks around that DEP has approved for peak flow storage.

Mr. Weaver noted that the other point on our side is that in talking to people around the country at these conferences, no one is spending more money than Lower Paxton. He noted when we are done with this you will have \$50 million for storage and \$200 million in the sewers as we spent \$120 million to date and will spend another \$140 million. He noted when you look at it there is still a huge investment into the sewer system. He noted when we go to DEP we will ask them if there is anyone else in the country that spent \$200 million on their sewers. He noted that no one has done this.

Mr. Stine noted the only issue that he sees is you have a contract with DEP that says you will do one thing. He noted if he was DEP he would say here is our contract and this is what you are going to do as this is what you promised you would do. Mr. Seeds noted that part of the CAP mentioned storage in 2022. Mr. Wendle noted if we are allowed to come in with the storage early. Mr. Whittle noted that it states in the decision that we can use storage 15 years into the agreement. He noted all that we are doing is making the decision a little earlier. He noted that it states that you can evaluate storage at that 15 year period.

Mr. Whittle noted that it will be in the presentation as to how it will benefit them to make them see results much sooner. He noted in our current program they will not see relief until later.

Mr. Crissman questioned when you will talk to DEP. Mr. Eby questioned if you need a motion.

Mr. Blain noted that he would make a motion to present this plan to DEP. Mr. Crissman seconded the motion.

Mr. Wendle noted that you have two rate tables before you that were sent on Friday. He noted that they are not the final numbers because one of the numbers that Mr. Weaver had used from the beginning, the total reserves for 2016 is shown as \$13,674,875. He noted that it was

based on the reconciliation that he had from 2014. He noted that he was informed today that Ms. Knoll has done another reconciliation and projected that as of today it is \$15.8 million at the end of the year. He noted that will impact the rate tables. He noted that he needs to see what it will impact it will have on both rate tables. Mr. Wendle noted that you have the worst case scenario in front of you. He noted that you could proceed with doing the \$8.80 annual quarterly rate increase and still maintain a reasonable reserve in the low year of 2032. He noted if you look at the updated plan in 2029 it is down to \$175,243. He noted that you will not be there because of the change he was informed of today. He noted that it would be at least \$2 million more than that. He noted if you go back to 2018, the estimated year end PLGIT ARM funds it show a negative \$3.2 million and then he shows a borrowing in 2019. He noted that he was funding it with some of the reserve, but it was supposed to have been paid back into the reserves when the borrowing occurs the next year, but it isn't. He noted if you look at the difference between 2018 in terms of total reserve it goes from \$8.4 to \$7.1 because you have a \$1.2 million deficit in operations. He noted that you need to add another \$3.2 million to that because it gets paid back. He noted in terms of trying to maintain your goal of 25% of operating costs, in figuring out the annual rate, it is pretty much what is shown on the chart except that you will be able to reduce the \$8.80 to do the storage option. He noted for the other one chart, it gets pretty much out of control and in order to maintain a 25% reserve you will be up to \$350 a quarter by the end of the program versus \$282 for the storage option. He noted that he tried to project out 20 years going out to 2037.

Mr. Wendle suggested that we speak to DEP as soon as possible to get their input. He noted that nothing changes much in the next year or two. He noted that we start to slow down in the following year. Mr. Whittle noted under the additional storage plan you can start to slow down.

Mr. Weaver noted if the Board does not make a decision soon, you won't get a decision and if you are doing the slow down plan it will be begin to back up. Mr. Eby questioned where to you want to put the storage tank in Beaver Creek. He noted if you wait longer to get DEP's understanding of the plan the potential that the property that is available for this system may not be available. Mr. Weaver noted that we have the landfill as the backup but then you have to spend an extra \$1million. Mr. Wendle noted that he did his cost estimates on using the Conway Road property as opposed to the landfill as it would cost \$1 million more to go to the landfill.

Mr. Eby noted that we spoke about an option for the property. Mr. Wolfe explained that it is in process. He noted that we are getting an appraisal.

Mr. Wendle noted by 2018 the city has to have a plan for how they will handle their combined sewer system overflows. He noted that there is a possibility that we can further reduce these costs if the City would participate in some kind of upstream storage or that they would allow the City to build Acti-Flo for their system to give us more capacity into the City. He noted, in terms of when we would get DEP's approval to build storage in 2022, we would not start to design anything until after that because we would want to see if in 2018 both Susquehanna and the City have indicated their willingness to share costs, and if it would result in a cost savings for everyone, it would be a greater advantage.

Mr. Crissman questioned if Mr. Wendle would anticipate that the City would do that. Mr. Wendle answered absolutely if it would help them. He noted that we are at almost half a billion, what do you think the City is at, over a billion and they have no money and have no industry to support it. He noted that he has no idea how they will pay for it. He noted that they have the federal government involved and have the justice department involved. He noted that they are serious about making the City do something.

Mr. Wendle noted that we should not start to design anything until 2018. He noted in terms of securing the property upstream in Susquehanna Township and in Beaver Creek you will have to build storage one way or the other. He noted that what we included in the cost estimates was assuming that we would purchase the Conway Road site and that the costs in Susquehanna Township would be about \$400,000 for a site there.

Mr. Weaver noted that he heard a motion and a second to proceed. He noted that he wants to know that he is authorized to meet with DEP and Swatara Township.

Mr. Seeds questioned if you need dates for the motion. Mr. Weaver answered that he only needs authorization for the engineer to meet with Swatara and DEP in regards to storage.

Mr. Seeds called for a voice vote and a unanimous vote followed.

Ms. Lindsey questioned if Mr. Weaver will meet with them separately. Mr. Weaver answered yes, initially.

Mr. Wendle noted that there was a site analysis done for the cost difference between the Conway Road property and the landfill.

## **TOWNSHIP REPORTS**

### PC-4A Mini-Basin Design – Alternatives for Creek Drive Area

Mr. Weaver noted that we discussed this at the last Board meeting and he needs to finalize the design for PC-4A. He noted that Mr. Wolfe has convinced staff that we should do nothing. He noted that there is no responsibility to help these people and we don't have a solution that works.

Mr. Seeds questioned if Mr. Weaver televised the current sewer lines. Mr. Weaver answered that we could not televise the sewers but we do know they are encased in concrete and they are asbestos cement pipe. He explained we don't know what the building sewer is because there were too many bends in the pipe.

Mr. Seeds noted that your recommendation is to do nothing. Mr. Weaver agreed, to do nothing to those ten properties. He noted if a sewer fails it is their private sewer and they can put in a grinder pump.

### **ENGINEER'S REPORT**

There was no engineer's report.

### **SOLICITOR'S REPORT**

Mr. Stine answered that he has no report.

### **Adjournment**

Mr. Crissman made a motion to adjourn the meeting. Mr. Blain seconded the motion and the meeting adjourned at 8:40 p.m.

Respectfully submitted,

Maureen Heberle  
Recording Secretary

Approved by:

William L. Hornung  
Township Secretary