

TOWNSHP OF LOWER MAKEFIELD  
BOARD OF SUPERVISORS  
MINUTES – OCTOBER 2, 2019

The regular meeting of the Board of Supervisors of the Township of Lower Makefield was held in the Municipal Building on October 2, 2019. Mr. Grenier called the meeting to order at 7:35 p.m. and called the Roll.

Those present:

Board of Supervisors:

Daniel Grenier, Chair  
Frederic K. Weiss, Vice Chair  
Kristin Tyler, Secretary (left meeting in progress)  
Suzanne Blundi, Treasurer  
John B. Lewis, Supervisor

Others:

Kurt Ferguson, Township Manager  
David Truelove, Township Solicitor  
Andrew Pockl, Township Engineer  
Kenneth Coluzzi, Chief of Police

#### COMMUNITY ANNOUNCEMENTS

Mr. Grenier stated the Yes You Can 5K to benefit the Pennsbury PTOs will be held on October 6, 2019.

Mr. Grenier congratulated Pennsbury for gaining a LEED Gold Accreditation for Pennwood Middle School. Ms. Tyler noted that Afton Elementary School was named a State-wide Blue Ribbon School.

Ms. Blundi stated the EAC has been working closely with Township staff and on the weekend of November 16 and 17, they will be planting trees around the baseball fields; and they are looking for volunteers.

#### PUBLIC COMMENT

Mr. Harold Kupersmit, 612 B. Wren Song Road, asked if there will be Budget “seminars” that the public can attend. Mr. Grenier stated there will, but they have not scheduled them yet. He stated the Board will discuss whether they will be held during the normal Public meeting or during special Budget sessions.

Mr. Kupersmit asked where they are on changing the Zoning to allow the Wegmans complex to be built. Mr. Grenier stated at their last meeting, the Planning Commission recommended approval of the Overlay to the Board of Supervisors with several Conditions. Mr. Grenier stated that has not been scheduled to come before the Board yet as there are several studies that have not yet been completed. He stated there is a regulatory process which includes a Public Hearing which needs to be advertised, and then there is a forty-five day period before the Public Hearing occurs. He stated during that forty-five day period it would go to neighboring Townships, the Bucks County Planning Commission, and the School District for their comments. Mr. Grenier stated all the comments will come back to the Board, and the Public Hearing would then be held and the Board will make a decision.

Mr. Kupersmit stated he was at the August 12 presentation that was stopped. He stated an individual making the presentation stated that the Pennsbury School District would get \$1.1 million in tax revenue, and that convinced him since the Pennsbury School District Budget is “out of control.”

Mr. Kupersmit stated he got a copy of the presentation that was made by the Township Manager, and he was “thrilled” because he laid out some of the problems that the Township is facing including the Golf Course debt, the potential sale of the sewer system, and the existing Bond debt which is over \$50 million including interest with a potential tax increase.

Mr. Kupersmit expressed his concern with the world economy.

Ms. Patty Piech, 2 Sandy Run Road, stated she sees that Sandy Run Road is on the Agenda; and while it was on the Agenda for the last meeting, it was not discussed. Mr. Grenier stated under Project Updates there is a running list of major Township projects, and they keep them on the Agenda in case there are updates from the Township Manager or Township engineer; however, at most meetings they usually only talk about a few of them. He stated he does not believe there will be any specific updates on Sandy Run this evening.

Mr. Ferguson stated they have been working on this issue although it is not specifically on the Agenda this evening. He stated he would defer to the Board as far as updates with regard to the bridge, meeting with PennDOT, and alternatives they have been examining. Ms. Blundi stated she would like to discuss this issue since she had asked that we look for alternatives to see what kind of relief we can bring to the residents.

Ms. Piech stated she has been in touch with two of the Supervisors, and she knows that moving the road is not an option.

Mr. Ferguson stated earlier this summer they were made aware that PennDOT was considering replacement of the bridge at Edgewood which was of concern to the staff since the re-design of the road as had been contemplated could have been impacted by what PennDOT would do with the bridge. He stated if PennDOT were to raise the bridge and change the sight line, it could have an impact on the project. He stated the staff was concerned that if the Township was going to spend a significant amount of money to move the road and then the bridge were put in at a different elevation, that could affect the sight lines; and they did not want to have to spend money again to fix it.

Mr. Ferguson stated they met on site with the District Representative of PennDOT to try to get a timeframe as to when they were going to do the bridge, and he feels it could take at least five years before they would replace the bridge. Mr. Ferguson stated he asked PennDOT if they could let the Township know if they would be putting the bridge in the same location or would they be changing the elevation which could change the sight lines; and the indication they were given at the meeting was that they would not be changing the sight line and would just be dropping the new bridge exactly where it is. Mr. Ferguson stated that meeting was coordinated through Mr. Santarsiero's office who was on site as well.

Ms. Blundi stated they had obtained a third party reviewer to look for other solutions, and she asked for a status on where that is. Mr. Ferguson stated part of the problem with the plan that was discussed of moving the road 94', was the concern expressed by the third party reviewer that any left-hand movements, especially in but out as well, could potentially cause safety problems.

Mr. Ferguson stated they had installed temporary chicanes to measure the speed of traffic; and the point of doing that was to see if they could get traffic to slow down enough to facilitate the left-hand turn. He stated the measured speed they got traffic down to was 32 miles an hour; however, the independent reviewer concluded that 32 miles an hour was not slow enough to accommodate left-hand turns. Mr. Ferguson stated they asked the third party reviewer to look into alternatives, and he has indicated to the staff that there is no way to reopen the road where the left-hand turn is allowed either way unless they raise the profile of the road significantly higher which would then give longer sight lines. He stated this could be raising the road or shaving off a little bit of Edgewood coming down off the Railroad tracks.

Mr. Ferguson stated the third party reviewer has looked at other alternatives, that have not been presented publicly but he has discussed with staff, that would allow for a more limited opening of Sandy Run that would prohibit left-hand turns, but would be different creative ways to allow traffic to still move. Mr. Ferguson stated he would defer to the Board as to a future public discussion about this issue.

Mr. Grenier stated the Board of Supervisors has not seen any of these options yet in Executive Session or in public. He stated the version of the proposal that they saw came right up to the edge of the floodplain, and would partially use the retaining wall to make sure that they did not grade into the floodplain so they were maximizing the space. He stated they need to integrate the PennDOT design of the bridge, since it could be raised up which could change the profile of the road, and integrate it with anything the Township does with Sandy Run so that engineers can sign off that it is safe. He stated they are considering other options as well.

Ms. Piech stated right after the extra track went in she spoke with the chief engineer of that project, and they knew then that it was an issue. She stated she does not know why the road was graded the way it was. She stated she was told that CSX had a fund to help pay for remediation since they knew it was going to be a sight line problem, and years have gone by with nothing done. She stated going through the tunnel bridge on Reading Avenue is a hazard.

Ms. Piech stated she recalls that it was indicated a traffic light would not work because it would back up traffic onto the Railroad tracks. She asked if there could be a traffic light at Sandy Run and a traffic light at the top before the Railroad tracks, recognizing that it would be close to the light at Oxford Valley Road. She stated those lights could be coordinated so that traffic would not be coming down when Sandy Run had the turn signal to make the left turn, as well as having it be a "No Turn on Red," so that traffic would be stopped before the bridge, and Sandy Run traffic could go. Chief Coluzzi stated coordination of the lights would be problematic, and they would have to involve the Railroad as well. He stated Ms. Blundi had asked that they look into that to see if a light would work at that location, and the third party reviewer did look at it; however, there was no safe way to put a light there that would not interfere with the Railroad tracks. Ms. Piech stated there would have to be two lights. She stated anything that is done would take creative thinking. She noted what exists going through the tunnel on Woodbourne Road where there are flashing lights. She stated she feels this is an option to look at so those coming out of Sandy Run can make a left-hand turn. She stated it has been a long time, and she is concerned that this is not considered to be an important issue.

Mr. Ferguson stated the Board of Supervisors empowers the staff to work on a variety of things, and the third-party review was the result of multiple meetings and significant time analyzing all of these options. He stated Chief Coluzzi provided the third party reviewer with everything the Township had looked at including all of the options, and asked that they all be reviewed and that they also consider any other alternatives that would be a reasonable means for the road to be opened; and that is what they have been working on for a couple of months and reporting back to the staff.

Mr. Ferguson stated at some point, they will be able to address more specifically the safety limitations and come in with some possibilities with the goal of reopening the road safely and people being able to travel in the direction they choose.

Ms. Piech asked if there is an idea when something would be brought forward to the Board. Mr. Grenier stated he assumes they will have something to look at by the end of the year if there is a good option presented by the third party engineer. He stated there will be an internal presentation at the next Executive Session to see if there is something they could move forward with; and if that is the case, they would then bring it up for public discussion. Ms. Blundi stated if that is not the case, they will let the public know what is going on. Ms. Piech stated the residents had not heard anything, and it would be good to hear that the Township is trying to do something.

Ms. Beth Cauley, 1355 James Court, stated she saw on the Website that the last Sewer Authority meeting was in May; however, it also indicates on the Website that the Sewer Authority meets the fourth Thursday of each month. She asked if there is a reason why the Sewer Authority has not met since May in light of the “sewer being sold.” Mr. Ferguson stated the sewer is not being sold, rather it is being analyzed. He stated the Sewer Authority takes every summer off. He stated the sewer engineer is present this evening, and he does not take the summer off, and he presented a variety of options to the Sewer Authority that are going to be the subject of a report that will be coming out regarding all of the alternatives that have been looked at regarding treatment plants, etc. Mr. Ferguson stated this past week, the Sewer Authority was scheduled to meet; however, they had an unexpected resignation on the Sewer Authority of a long-time member that resulted in the Sewer Authority not having a quorum so at the last minute, they had to cancel that meeting.

Ms. Cauley asked if the Board of Supervisors is considering the option of maintaining ownership of the sewer system while contracting out the operation and maintenance of the system. Mr. Ferguson stated that is one of the options that is being evaluated by PFM, and that is called a Concession Lease. He stated it will be determined if that option will be included as part of an RFP process when that is put out.

Ms. Cauley asked when the Bids will be in with regard to “companies wanting to buy the sewer.” Mr. Ferguson stated there is no decision on that yet. He stated they are in management meetings with companies, but there has been no time line set as to when that would go out. He stated he anticipates that PFM will be coming back to the Board prior to the Bids going out. Ms. Cauley asked if the Board plans on voting on the sewer before or after the Election, and Mr. Ferguson stated once they put an RFP out, they will probably give them sixty days to respond. He stated they have had meetings with the companies that responded to the Request for Qualifications, since before they bid, the companies want to know about system. He stated some companies have toured the various facilities, and they will have additional meetings and tours this week. He stated the Township is not in a position to put a Bid out at this time, and the companies would not be in a position to respond to that until they do their due diligence as well. Ms. Cauley asked if it could go into next year, and Mr. Ferguson stated that is possible. Ms. Cauley stated it would not be within the next month or so, and Mr. Ferguson agreed. Ms. Cauley asked if there will be a Board of Supervisors meeting about this, and Mr. Ferguson stated that would be for the Chair to decide. He stated if they are talking about the Budget and a variety of things, he would imagine there would be a Public Meeting, and they would have to look at the Agenda to see if they could do it at a regular meeting or would need to have a special meeting to have a presentation before that would go out for Bid. Mr. Grenier stated any special meeting would be advertised.

Mr. Robert Abrams, 652 Teich Drive, stated previously his qualifications were challenged, and he reviewed his education and his business qualifications. Mr. Abrams stated there was somewhat of a drought recently, and there was \$500,000 extra put into the Budget for excessive gallonage from last year; and he assumes that if the rainfall was less, the \$500,000 will be credited back to the taxpayers in the 2020 Budget, and therefore they will not need a 40% increase. Mr. Ferguson stated that assumes that every Budget they have on repairs, etc. would be on Budget or under Budget to be able to do that. Mr. Ferguson stated the Budget that was passed had a Fund Balance in the Sewer Fund in the tens of thousands of dollars on a \$7 million Budget which is not healthy to begin with. He stated if there is a decent Fund Balance left because they came a couple hundred thousand dollars under, he would presume that they would roll that over, and that would factor into a rate increase for the following year as he looks at the cash flows on a year-to-year basis. He stated in spite of the last month being dry, the first six to seven months were exceedingly wet so he will have to look at where the year-to-date figures are; and if it shows in the end that there is more cash than they anticipated, the rate increase may be less.

Mr. Abrams stated he is questioning why the amount is going up so quickly because the reason for that amount going up that quickly may be to make it more attractive to a buyer. He stated if he is paying 40% more, that means the revenue is 40% more to the buyer before anything else is done.

Mr. Abrams stated at the meeting regarding Wegmans, he asked that if anyone has any personal business dealings or has taken any money from the developers, they should disclose it to the public. He stated since “you people have been sitting up there, apparently this whole Township is for sale.” Mr. Abrams stated they are talking about selling the sewer, and they sold the tower. He stated with regard to the tower money, what was stated at the last meeting was that they could make \$50,000 by putting it into an account; and he asked when they are going to do that. Mr. Ferguson stated part of his presentation at the last meeting showed that the Board members at the time, unbeknownst to them, would not have had a clear status of what the financial condition of the Township was at the end of 2017 and 2018. He stated the point of the clarification of those funds was so that the Board could make informed decisions. He stated the cash flow that he presented to the Township was accurate; and if we have the ability to move some of that money which was discussed at the last meeting to a higher-bearing interest account, he will do it as long as they can keep it liquid recognizing that we do not have a significant amount of money. He stated he will analyze this going into the Budget year with the idea that he wants to generate more revenue if they can.

Mr. Abrams stated with regard to the “Wegmans property,” he had indicated previously that there was going to be lawsuit on top of lawsuit; and there is already a letter from the Shady Brook attorneys. He feels what they are proposing for the property in that area is a “disgrace.”

#### APPROVAL OF MINUTES

Ms. Tyler moved, Ms. Blundi seconded and it was unanimously carried to approve the Minutes of September 18, 2019 as written.

#### AMERICAN TOWER LEASE EXTENSION

Mr. Grenier stated they are not considering this matter this evening, and it will be considered at a future meeting.

## SEWER LATERAL ORDINANCE DISCUSSION

Mr. Fred Ebert, Township sewer engineer, was present. Mr. Grenier stated the DEP has mandated that all the Municipalities in our area institute a Sewer Lateral Ordinance. He stated they had the first presentation on this in the spring, and they are getting close to the time when they need to move forward with this.

Mr. Ebert stated this was mandated by the DEP, and it was specifically a part of the DEP's approval of the Township's Act 537 Plan which is the Township's plan for how to sewer the entire Township. He stated in this case it was the Neshaminy Interceptor and the Bucks County Water and Sewer Authority. He stated when the DEP approved this on November 5, 2018, they required the Township to adopt this within one year which would be January, 2020. He stated DEP is requiring this of almost all the Municipalities as they update their 537 Plans. He stated it is very common in all Townships and Boroughs throughout Bucks and Montgomery Counties, and he reviewed other areas where it is required.

Mr. Ebert stated the purpose of this Ordinance other than the fact that it is mandated is to reduce our inflow and infiltration into the public sanitary sewer system. He stated inflow is surface water that goes through; and if there is a clean-out that is broken or a sump pump, that is inflow. He stated infiltration is due to cracked pipes and things that are below the surface. Mr. Ebert stated almost 50% of the entire linear footage of the sanitary sewer system is in the laterals. He stated the mains in the street are only half of it, and that is the only portion that the Township can maintain and operate. He stated this is why this Ordinance is so important because this is the single, most-effective method there is to reduce wastewater flows. He noted an area he worked in where they had eighty-nine overflows a year; and once this Ordinance was adopted, within three years, they had zero spending no other money. He stated he has worked in other Townships that have had 40% to 50% reductions in their flows through this Ordinance even though they recently had the two wettest years. Mr. Ebert stated for those Townships who do not have this Ordinance like Lower Makefield, their flows are up 50% to 70%.

Mr. Ebert stated this is very important for Lower Makefield because the majority of our costs are passed onto the Township from treating Authorities; and the only thing we can do to lower our costs is to reduce our flows. He stated it will also reduce Capital expenses to upgrade the pump stations due to capacity.

Mr. Ebert showed a graphic of a traditional lateral connection, and he showed the area owned by the Township and which portion is owned by the property owner which is the area from the clean out back to the house.

Mr. Ebert stated the Lateral Inspection Ordinance only covers the private lateral, and the Township is still responsible for the public portion of the sanitary sewer system; and the residents would not be responsible for digging up the road as a result of the Ordinance, and the majority of this work would be in grass areas.

Mr. Ebert stated Lower Makefield has a lot of HOAs and Condominium Associations, and these involve shared common laterals. He stated they met with those stakeholders on September 17, October 1, and there will be another meeting on October 10. He stated they were provided meaningful input from the HOAs. He stated in those cases there are three components – the public portion, the middle portion which is the common manifold which is the HOA responsibility as represented to him by the stakeholders who manage the HOAs, and the third component which is the private portion which is the individual lateral until it goes to the common manifold.

Mr. Ebert stated 99% of the inspections are required upon transfer of property, and this will protect the homebuyers; and when the property is sold, there is income coming in so that there is the ability to pay for the inspection and the repairs. Mr. Ebert stated another time this would be required would be if the Township intends to repair or replace a conveyance line, and they would also mandate these inspections because DEP or someone has targeted that. Mr. Ebert stated another time would be if the Township were to see an overflow or excess of flows while televising and they see that someone has connected their sump pump, there is the obligation to have the property owner remedy that so it does not cause a public health, safety, and welfare issue.

Mr. Ebert stated the inspection would be a visual inspection of the building to see if there are sump pumps connected in, and there are vents and clean-outs that they will see in the video which are extended above grade. He stated many times it is a simple repair where someone cut off the top of the vent pipe when they hit it with a lawnmower. He stated the clean-out would need to be raised above grade. Mr. Ebert stated the video inspection would be from the sanitary sewer lateral from the building to the edge of the right-of-way or the curb line. He stated the property owners are not responsible for the public portion, and that is the Township's responsibility. He stated if something is found in the public portion, the Township will repair it, although possibly not immediately, and they may wait until there are ten to fifteen that need repair together which would then be a Capital project.

Mr. Ebert stated the Ordinance requires the property owner to complete the Private Sanitary Sewer Lateral Inspection Application, complete the inspection, repair any deficiencies that have been identified, and verify that no sump pumps or

surface drains are connected. He stated this will be reviewed and approved by a Lower Makefield Township representative, and the approved inspection form will be signed and becomes the Permit.

Mr. Ebert stated with regard to who can perform this work, the property owner can hire any licensed plumber with lateral video inspection equipment who would perform the work and complete the inspection. He stated Lower Makefield will be preparing a Bid for this inspection work to identify companies and their charges for this work. He stated they can then provide the information the Township receives on the Bidders and their costs to the residents so that they know that this has been Bid through a competitive and public process. He stated this will make it easier for the residents to know how to proceed while they are dealing with the sale of their home which can be a high-stress time. Mr. Ebert stated he would not recommend any one firm, and they should simply provide a competitive Bid that can be provided to the residents.

Mr. Ferguson stated the bidding process is not meant to exclude anyone; and if someone does not want to use anyone on that list and they have their own plumber, they are not required to use anyone on the list although it will give them guidance as to a price in a competitive Bid. He stated most people would not know who to go to or how they would know they are qualified so this is meant to decrease the strain they would have out of fear that the sale of their home would be held up. He stated the Bid the Township would have would outline all of the protocols as to reporting, how to get the video to the Sewer engineer, and to try make it a seamless process. Mr. Ebert stated it provides checks and balances on the price.

Mr. Grenier stated that is something separate from the Ordinance that has to be passed; and Mr. Ebert agreed adding this is just a potential service that the Township can provide to the residents.

Ms. Tyler asked the specific mandate of the DEP with regard to lateral inspections. Mr. Ebert stated the DEP requires that the Township pass the Ordinance. Ms. Tyler asked what the content has to be, and what has DEP indicated needs to be the minimum content of the Ordinance. Mr. Ebert stated the DEP reviewed the draft. He stated the common element that they are looking for is that it occurs at every property transfer, or when the Township does a sewer project that is mandated by DEP or some other regulatory agency to address a health, safety, or overflow issue. He stated if the Township has direct knowledge that there is a significant amount of I & I entering from one lateral, the Township has the ability to go in and address that. Mr. Ebert stated the proposed Ordinance is based on a combination of many similar Ordinances and includes the core elements.

Mr. Ferguson stated one of the requirements is that there needs to be a visual inspection under two circumstances – either every time a property sells, which would be the traditional requirements for a single-family house; or in the event of an HOA with shared laterals, it would be difficult to do this all the time, so it would be under some agreed upon time frame over a period of years that there would be televising, evaluations, and repairs. He stated that is the DEP's condition for timing.

Ms. Tyler stated she does understand the mandate to visually inspect the lateral between the Township pipe and the home; however, what she does not understand is entering someone's home. She asked if there is a mandate by the DEP to go beyond the lateral inspection. Mr. Ebert stated the mandate by DEP is that there are no sump pumps or roof leaders connected. He stated they have to enter the home in the basement in order to put the lateral camera from there to the main. He stated if, while they are there, they see a sump pump connection, they have to report it. He stated they are not to do a full house inspection. Mr. Ebert stated there are some places where there is no basement so they could not physically go into the house; however, DEP does require that they include sump pumps and roof leaders in the Ordinance.

Mr. Lewis stated there is no dye test, and Mr. Ebert agreed. Mr. Ebert stated it is a video inspection and to confirm the results of the video inspection. He stated they will check that there are no sump pumps, a "Y" connection, or roof leaders.

Ms. Tyler asked if the way to visualize the lateral has to be done from inside the house, and she asked if it could be done from the street side. Mr. Ebert stated it can be done from the street side although it is much easier to do it from inside the house. He stated the way the clean-outs are set it is a "Y" connection which is meant to go in one direction. He described the instrument that is used. He stated they have to go from the street when there is no basement. Mr. Ebert stated the fastest and easiest way is to go inside and televise out. Mr. Ebert stated once people understand that the sump pump is not supposed to be connected, the property owners take it out because they did not know that it was illegal to have it connected.

Mr. Ebert stated with regard to who can do this inspection, Realtors can also give recommendations.

Mr. Grenier asked Mr. Ebert if he has had any meetings with Realtor groups, and Mr. Ebert stated he has not. He stated he did this previously; however, this is so common that Realtors do not need to meet with him adding they are all surprised that the Township does not have this Ordinance.

Mr. Ferguson stated with regard to the concern about the inspector coming into the house in most cases this would be part of the property sale and it would be equivalent to a home inspection that would be done, when an inspector inspects inside and outside of the home; and Mr. Ebert agreed.

Mr. Ebert stated the property owner will hire a licensed plumber to perform the work. The licensed plumber will then perform the site inspection, the video inspection, complete any necessary repairs, and complete the Inspection Form. He stated the property owner, not the plumber, is responsible to submit the Inspection Form and the video to the Township. A Township representative will review the video and the Inspection Form and either approve the form or require any additional repairs needed to be done to the lateral.

Mr. Ferguson stated apart from limiting infiltration, the buyer would know that the lateral has been inspected and approved or fixed similar to a home inspection. Mr. Ebert stated the new buyer would know that the lateral met Township standards when they purchased the home.

Ms. Tyler stated the Township does not currently sign off on anything else to do with transfer of property, and now we are introducing a huge process. She stated she is also concerned about the administration of this, and she asked how many home transfers there are. Mr. Ferguson stated there approximately sixty a month. Mr. Ferguson stated if I & I is happening all over the Township, and 40% to 50% of it could come from the laterals, the only means to catch that is to have it as part of a Lateral Ordinance required at the time of property sale where the property owner is responsible for fixing it. He stated it is possible these laterals could have been leaking for decades, and the homeowner would have no awareness of that.

Ms. Tyler asked if they know where we have I & I through the pump stations. Mr. Ebert stated they do. He added that we are in the first year of our Corrective Action Plan, and they identified the far northwestern section. Ms. Tyler asked if it is throughout the Township or is it certain areas. Mr. Ebert noted three specific areas. Ms. Tyler stated the areas Mr. Ebert has identified are the newer sections of the Township. Mr. Ebert reviewed work that they did to look into this as it relates to the creek in the area. He stated he believes that it is a groundwater problem which means that it is an infiltration problem. He stated he contacted Mr. Hucklebridge today asking him to televise certain areas.

Ms. Tyler asked Mr. Ebert if he has done a similar analysis to the middle and lower parts of Lower Makefield and found the same issues elsewhere, and Mr. Ebert stated he has not done that as directly as he did with the upper section. He stated under

a systematic inspection in the Neshaminy area, he is working north to south. He stated he does analyze the pump stations yearly, and he does flows per EDU. He stated he knows that Maplevale has much more flow than other pump stations do. He stated they used that information as part of the Seven-Year Capital Plan that he prepared with Mr. Ferguson. He stated he identified the areas that have the highest probability, and he will fix the problems when there are sufficient funds to do so. He stated when they go through the Budget for next year, he will re-prioritize any money they have, and fix those.

Mr. Grenier asked if this has anything to do with the Ordinance. He asked once they go through one cycle of the Lateral Ordinance, what would be the reduction they could see. Mr. Ebert stated usually you do not see any change for three years. He stated usually in other Townships 10% to 15% of the houses sell in three to seven years. He stated in other Township he has seen a 20% to 30% reduction in flows in three to five years.

Mr. Lewis stated he is happy to see that there has been some initial analysis done since he had asked in March where there were problem areas. Mr. Ebert stated it is the northwestern portion of the Township in the Neshaminy area. Mr. Lewis stated he feels it would be good to map out where they feel there are problems now, and provide that in a report to the Board of Supervisors.

Mr. Lewis stated with regard to the Lateral Ordinance, he wants residents to know that there are some strategies to deal with this before it becomes a high-cost issue for them. He stated there is sewer line insurance which is typically offered by Pennsylvania American Water, and it is also offered in homeowners' insurance at a cost of approximately \$10 to \$15 a month. Mr. Lewis stated he has this for his water line, and water line issues can be extraordinarily expensive. He stated if the Township sees that there is an issue in a particular neighborhood, the residents should consider sewer line insurance.

Mr. Ebert stated the Inspection Form will become the Permit, and the Permits will be retained by the Township so that they can be referenced by the property owner. Mr. Ebert showed a graphic of the Inspection Form. He stated the Township representative will sign it. He stated there is also a Site Sketch which is important for the property owner as well as the video.

Mr. Ebert stated with regard to properties with common laterals, HOAs, he met or will meet with all the HOAs that they are aware of. He stated they met on September 17, October 1, and will meet on October 10. He again showed the graphic showing each portion of the lateral. He noted this information came out of the meeting held yesterday based on the HOA input. He stated they indicated that the HOA would be responsible for the common manifold, the middle third; but the individual property owners own and are responsible for the lateral from their unit to the

common manifold. Mr. Ebert stated the third portion would be the Township portion. Mr. Ebert stated they have proposed a schedule for HOAs. He stated the HOAs have already prepared their Budgets for 2020 so it would be too late to include this in 2020. He stated there will be a ten-year cycle. He stated in 2021, they would budget for this cost and then perform the video inspection in years ending in a 2. He stated they would get a cost estimate for any repairs in years ending in a 3, and they would perform and complete the repairs in years ending in a 4. He stated there would be an allowance for a major repair hardship in years ending in a 5.

Mr. Ebert stated video inspection could be \$150, and if there are 500 units that would be a significant amount of money that the HOAs would have to raise. He stated the Township would pass this in 2020, but the HOAs would not have to spend any significant money until 2024. He stated the private portion would be done at the time of property transfer which would be the same for any other home that is sold.

Mr. Ferguson stated there was a variation of this with regard to the HOAs in the original Draft; however, as a result of the meetings, they came up with this configuration based on the insights from the HOA indicating this is how they would prefer this be done. He stated yesterday they met with six HOAs, and they were all in favor of this process and the timeframe. Mr. Ferguson stated he believes they will be in compliance with DEP provided they agree to make the repairs over a period of time. Mr. Ferguson stated the HOAs could start assessing the Fees several years in for the next round, and this would be a ten-year process; and they would televise, make the repairs, and then they would have five to six years where the HOA would not be doing anything other than assessing the Fee, collect it, and build a Capital Reserve for the next time they have to do it five years in the future.

Ms. Tyler stated while this makes sense, it seems counterintuitive since generally in a Condominium, common area is “walls out.” Mr. Ebert stated that was how he approached it initially; however, after meeting with the HOAs he has adjusted it based on what the HOAs advised him was written in the HOA documents.

Mr. Grenier stated a future HOA could have a different set-up, and he asked if there are options for that. Mr. Ebert stated he had to try to put something in that would be for the majority, and they may have to put a “hardship or exception in there.” He stated if there is a future HOA, now that this rule has been created, they would know how to implement it in their HOA documents. Mr. Grenier asked if there is a precedent with the DEP to be accepting of this process; and Mr. Ebert stated he discussed it with the DEP representative this morning, and she had no problem. Mr. Ebert stated the HOAs had their solicitors present at the meeting as well.

Mr. Ebert stated the Ordinance will be effective on January 1, 2020 although if the Township needs another month, he does not believe DEP would have an issue with that. He stated the Township needs to identify a Permit Fee and include it in the 2020 Schedule of Fees. He stated the Board could consider advertising the Ordinance at the October 16, 2019 Board of Supervisors meeting depending on the input tonight. He stated depending on the Board's questions, he will ask for a due date as to when the Board wants the Ordinance incorporating comments from tonight's discussion. Mr. Ebert reminded the Board that they just had a major change yesterday when they met with the HOAs, and there is another meeting with some of the HOAs on October 10 although he does not know if there will be changes coming out of that meeting.

Ms. Tyler asked what is the minimum requirement of DEP. She stated it seems that there should be an identification of an I & I problem before a blanket rule is put in. Mr. Ebert stated "the blanket identification" is that we have a Corrective Action Plan for the entire Neshaminy Interceptor – thirteen Municipalities – and Lower Makefield's flows are among the worst as far as average to peak flows. He stated he is systematically going down through it. He stated the older half of the Township goes to Morrisville, and we have seen the impact on our sewer treatment charges from "15 and 16 to 17 and 18" the amount that has gone up which is strictly because of the volume.

Mr. Ebert asked for a due date from the Board adding he has to make revisions and give it to the Township solicitor. Mr. Grenier asked if there is one more HOA meeting, and Mr. Ebert stated there are two both on October 10. Mr. Grenier asked the advertising period for this Ordinance, and Mr. Truelove stated it would be seven days. Mr. Truelove stated Ms. Kirk is familiar with this type of Ordinance. Mr. Ebert stated he has a draft, but he has not incorporated any of the HOA information, and he wants to give Ms. Kirk time to review it. Mr. Grenier stated something may come out of the meeting on October 10, so he feels the Board would have it for the first November meeting. Mr. Ebert stated he would like to have a draft to the Board to review by the 16<sup>th</sup> which could be concurrent with the solicitor's review; and they could then make revisions the following week so they would have the Final version by the first November meeting.

Mr. Ferguson stated this type of Ordinance would have a ten-day period so they would not need to rush it. He stated if they agree to advertise it at the November 6 meeting, the Board could approve it at the next meeting; or if there was a change, they would still have time.

Mr. Lewis stated he is happy that Mr. Ebert has looked at existing I & I before this Ordinance, and he would like more detail on that; and he asked that the reports be provided to the Board. Mr. Ebert stated they are not required to do a Corrective Action Plan bi-annually; however, he went ahead and did it because he wanted to

get that data in to DEP to get their feedback. He stated they are doing this voluntarily, and his staff prepared this for the September Sewer Authority meeting although they could not meet because they did not have a quorum. He stated he will share it with the Board of Supervisors.

Mr. Lewis stated in March he had asked specifically how they would handle homes that turn over frequently particularly HOAs. He stated in March Mr. Ebert had indicated that the Permit could be written for three years; however, the draft Ordinance does not indicate this. Mr. Lewis stated he would like to see something specific that indicates that if someone gets a Permit, then if the homes sells again prior to three years, they would not have to do this again.

Mr. Lewis stated also in March, all Board members asked about the HOAs, and he is glad that they have found a potential way of dealing with that. He asked what would happen in year 6. Mr. Ebert stated it would be based on “year ending,” and they would start their next cycle in 2032, and then 2042. He stated it is a ten-year cycle for HOAs. He stated the video inspections happen in 2022, 2032, and 2042, etc. Mr. Lewis asked if it felt that the risk associated with HOAs is less than with an individual homeowner. Mr. Ebert stated once they get past the first “clean-up” they should be good. He stated one of the things that will stop is having trucks driving over the laterals. Mr. Ebert stated he has not had a house that had a repair done then have a failure or one that passed then fail subsequently to date.

Mr. Lewis stated in March Mr. Ebert had indicated that he would be back in June with the Revised Ordinance, and he asked why that did not happen. Mr. Ebert stated it took them that long to get together with the HOAs as they had to identify all of the HOAs, and it was difficult to schedule the meetings during the summer. Mr. Ferguson stated they now have a master list of all the HOAs.

Mr. Lewis stated the deadline is January, 2020; and Mr. Ebert agreed, and the DEP representative has been kept abreast of what has been taking place.

Mr. Lewis asked that he be provided the Permit Application as the one provided had very small print, and he asked that be provided at the same time they are working on the draft or now if it is available. Mr. Ebert stated he can leave that this evening as well as a copy of the Power Point presentation. Mr. Lewis stated he is going to have his lines looked at according to the Permit Application so that he can see the process as he would not want to vote on something that he himself would not be willing to do. Mr. Ebert stated he is also going to provide instructions

for the contractors once the Ordinance is passed. Mr. Ebert stated the Power Point presentation could also be put on the Township Website if the Board wanted to do so. Mr. Ebert stated he wants to educate the residents and make this as easy as possible.

Mr. Grenier asked with regard to the Permit Fee is that something that the Sewer Authority has to provide guidance on. Mr. Truelove stated while it would be good to get their input, it is not mandated that be done; and it is the Board of Supervisors that would approve that.

Mr. Lewis stated Mr. Ebert will be providing him information on “how to inspect,” and the draft Inspection Form. Mr. Ebert stated he will provide the draft Inspection Form this evening and will give the inspection guidelines to Mr. Lewis once he has prepared that. Mr. Ebert stated he usually does that once he has the Ordinance in its Final form so that it conforms.

Mr. Harold Kupersmit asked Mr. Ebert his opinion on the state of the treatment plants that serve Lower Makefield. Mr. Ebert stated there are two treatment plants that service the Township. He stated the first one is the City of Philadelphia treatment plant which he feels is in average to good condition; and the second is the Morrisville Municipal Authority system which is in fair to poor condition, and it is near the end of its design life which is why they are looking to upgrade it in the near future. Mr. Kupersmit asked Mr. Ebert how much he estimates it would cost to upgrade it; and Mr. Ebert stated while he does not know, they are evaluating that at the Sewer Sub-Committee. Mr. Kupersmit asked Mr. Ebert if he would recommend a new plant or fix and maintain the old plant. Mr. Ebert stated there are a number of options, and they are evaluating all of them; and they will be sharing the Sewer Sub-Committee’s evaluation of all options both operationally and financially in the upcoming weeks.

Mr. Kupersmit asked “what are the odds of someone inventing a plant” that does not cost as much as the current plants. He stated Mr. Ferguson put \$50 million in his presentation. Mr. Ebert stated the cost would be based on size, and there has been no technology available to date that has reduced the cost.

#### ENGINEER’S REPORT

Mr. Pockl stated he provided his monthly Engineering Report in the Board’s packet.

Authorize Escrow Release No. 7 for the Yardley Woods Development

Mr. Pockl stated they inspected the work that was done and found that it is in line with the requested amount which is \$382,083.92.

Ms. Tyler moved, Ms. Blundi seconded and it was unanimously carried to authorize Escrow Release No. 7 as outlined by the Township engineer in the amount of \$382,083.92.

Mr. Pockl stated the total remaining is \$749,315.00 after this Release.

Authorize Bid for the Laurel Lane Drainage Improvements Project

Mr. Pockl stated this the second time that they have put this project out to Bid, and the first time they received no Bids. He stated the second Bid opening was this past Monday, and they received five Bids that ranged from \$86,225.00 to \$134,05.18 for the Base Bid. He stated this is significantly more than what he had estimated by approximately \$30,000. He stated he believes this is mostly a product of the Bidding climate at this time. He stated this is a difficult project and it is a small project. He stated it is not a project that is large enough where you can get an economy of scale so he does not believe that if it were Bid out again, they would get better results.

Mr. Ferguson stated as discussed during the Budget process last year, there are going to be these ongoing stormwater projects year after year that are going to have to be done. He stated every year they will have projects with storm sewer repairs, run-off, etc. He stated while this is more than was budgeted, he has given an expectation of where we will be at the end of the year. He stated while this project is not being required by anyone at this time, the Township does have annual reporting that has to be done showing these projects. He stated he feels they can sustain the number this year even though it is approximately \$30,000 more than was anticipated. He stated he would recommend proceeding with the Bid.

Mr. Grenier asked if this is required under the MS4 or is this something that was noticed that needs to be dealt with irrespective of the MS4. Mr. Pockl stated this would not be affiliated with the Pollution Reduction Plan. He stated with regard to the MS4 Program, the Township is responsible for maintaining their system and making sure that stormwater run-off reaches Waters of the Commonwealth in a safe and reasonable manner, so he would consider this a necessary cost to maintain the Township's storm sewer system.

Mr. Grenier asked if there have been any “lessons learned” as to cost for future projects. Mr. Pockl stated this is a unique project, and he feels given the constraints of the site that would be why this project came in higher. He stated overall what they have seen in other Municipalities and bidding Capital projects in general, is that the numbers are higher throughout the industry. He stated other engineers are seeing this as well.

Mr. Pockl stated included within the Bid was the Base Bid which was for the work to address slowing down the stormwater from the outfall, and there was also an Add Alternate Bid which was to stabilize the steep portion of the bank where the outfall is. He stated the stormwater pipe comes out and drains into a channel, and it has caused significant erosion over a number of years. He stated this is the area where it drains down to the Delaware Canal. He stated the Add Alternate was to stabilize with matting the steep portion of the bank along the Delaware Canal. Mr. Pockl stated he feels the Add Alternate was more of a “belt and suspenders” type of approach to give a level of comfort; and if they had received a favorable price that was within Budget, it made sense to recommend that the Add Alternate be awarded. Mr. Grenier asked if that is included in the \$80,000, and Mr. Pockl stated it is not. He stated the Add Alternate number is an additional \$12,920, and he is not recommending that be awarded. Mr. Grenier asked if he would be concerned about future erosion if it is not done. Mr. Pockl stated he is not concerned about additional erosion, and they could monitor this over time, and address the problem if it comes up in the future.

Ms. Tyler moved and Ms. Blundi seconded to award the Base Bid to Bi-State Construction Company in the amount of \$86,225.00 as outlined by the Township engineer.

Dr. David Mitchell and Ms. Michelle Mitchell, 2120 Stackhouse Drive, were present. Ms. Mitchell stated only her neighbors who live at 2200 Stackhouse, Dr. and Mrs. Garber, have been mentioned; however, Ms. Mitchell stated she lives on the other side of the Easement. Mr. Pockl stated they are immediately south of the outfall.

Dr. Mitchell stated they are asking that the Board reconsider the Alternate Bid. He stated the current Easement has been significantly eroded and has caused damage to his neighbor’s property - the Garber’s property. He stated the speed of the erosion has occurred since a house opposite was built approximately eight years ago. He stated he believes the address of that property is 2117 Stackhouse. He stated that impervious area increased the amount of water plus the Township did a project with a “wet well,” collection basin for the stormwater which then

channeled the stormwater down a grass Easement all the way down to the Canal. Ms. Mitchell stated it is Township-owned property. Dr. Mitchell stated after about 300' from the road, there is a 25%, one in four, slope. Dr. Mitchell stated the Base project does not allocate any money or work for that slope. He stated prior to the house across the street being built eight years ago there was significant erosion over the years, and the rate of it has increased since that house was built. Dr. Mitchell stated the erosion in the last eight years has caused a "disused phone pole" to become visible by about 4' to 6' visible so there has been 4' to 6' depth of erosion, and further up towards the road, the width of the erosion has increased. He stated the maximum width of the erosion down toward the Canal is approximately 20' and 15' deep minimum.

Ms. Mitchell stated they have owned their home since 1996 so they have witnessed this first hand and seen the erosion progress.

Dr. Mitchell stated he met with Mr. Pockl and Mr. Hucklebridge on the site and discussed his concerns with them. He stated when they were looking down the slope, Mr. Pockl had indicated "he did not think there would be erosion;" however, Dr. Mitchell had advised him that all they were doing was transferring the flow of water 20' from the left and putting down a mat and grass on the slope and then nothing after the slope. Dr. Mitchell stated he feels they are just going to transfer the erosion to another location. Dr. Mitchell stated he is familiar with hydro-dynamics in his profession. Dr. Mitchell stated Mr. Pockl was not able to say that would not occur; but they both have a concern that it could occur. Dr. Mitchell stated they are early enough on in this project to expect a problem, and he feels it makes sense to design against the problem rather than put money into a reserve fund and address it twelve months in the future if a problem occurs. Dr. Mitchell stated the problem will re-occur because there is no grass and it is deciduous trees so it is just soil and leaves on the slope. He stated it is a 25% slope. He stated there is no grass, and the tree canopy does not allow the grass to grow; and it is just soil.

Dr. Mitchell stated there will be erosion, and they have seen that erosion when they first moved into the house in 1996; and they could see the erosion down to the Canal. He stated there will be a lot of sediment going down into the Canal if they do not do anything. He stated he is not convinced that the mats are the best solution, but it is the best solution they have at this time without spending a lot of money for pipes and spreading the flow out laterally down by the Canal so that the velocity will diminish.

Dr. Mitchell stated in the current design, there is a sedimentation, surge, tank; and if it has a volume of 400 gallons with 100 water gallons coming down, the water will fill it up and come out at the same volume within four minutes. He stated he believes it will come out at the same velocity and with a 25% slope, it will be at a velocity that will cause erosion.

Mr. Pockl stated he does not agree with everything Dr. Mitchell has said.

Mr. Grenier stated he sees there is an inlet on either side of the road at the intersection of Laurel and Stackhouse. Mr. Pockl stated there is also an end wall on the Canal side from that inlet. He stated the discharge pipe is 15" diameter. He stated that discharges to an open swale that is between the two properties where there is a 20' wide Drainage Easement. He stated currently the swale is sloped at approximately 8%, and it is mostly trees with some undergrowth.

Dr. Mitchell stated they did put in stone. Mr. Grenier stated they were gabion baskets. Dr. Mitchell stated they did not work. Mr. Pockl stated he does not recommend those, and Mr. Grenier agreed.

Mr. Pockl stated erosion is not a linear process, and it tends to act exponentially; and once something erodes, it starts to accelerate. He stated once the slope started to erode, every future storm made it erode faster. He stated there has to be that initial cause of erosion in order for there to be future erosion.

Dr. Mitchell asked if there is any erosion on the Easement with the 8% slope, and Mr. Pockl stated within the channel there is vegetation but there is some erosion. Dr. Mitchell stated that is on an 8% slope, and what they are talking about is zero grass on a 25% slope; and he feels there will be erosion. Mr. Pockl stated they are two different conditions. He stated this is a point discharge from a 15" diameter pipe with the volume of water for a 100 year storm. He stated they are taking that discharge, bringing it down through the channel, and matting that drainage channel. He stated they are then putting it into a drop structure. He stated instead of coming out at 8% down the channel, the slope within the pipe is 1%. He stated then after it drops out of the pipe there is a plunge pool that acts as a settling pool to slow the water down; and once the water spills over the edge of settling pool, that is when it would approach the 25% slope.

Mr. Grenier asked coming out of the settling pool is it over a wall or out of a pipe, and Mr. Pockl stated it would be like a riprap hole within the ground. He stated coming over the edge, it would be coming over rock over a course of 20' wide as opposed to 15" wide. Mr. Grenier stated it will act like a level spreader, and

Mr. Pockl agreed. Mr. Pockl stated the velocity is zero as it is spilling over the lip of the plunge pool. He stated in addition to that for the first 20' they have another matting on the other side of the plunge pool which they believe will further slow down any kind of velocity of the water coming out.

Mr. Grenier asked if the matting is seeded with anything, and Mr. Pockl stated there will be hydroseed placed down in between the matting so there will be vegetation growing up in between the mesh. Mr. Grenier asked if the vegetation will be able to handle a shaded environment, and Mr. Pockl agreed.

Dr. Mitchell stated what they discussed was expanding that mat down the slope. He stated that would have to be done by hand and not using equipment because of the gradient of the slope.

Dr. Mitchell stated the original Budget for the project was \$55,000, and the low Bid was \$86,000, so they are \$31,000 over Budget. He stated the mats on the slope would be an additional \$13,000. Mr. Grenier stated that is the Add Alternate, and Dr. Mitchell agreed. Dr. Mitchell stated the total then would be \$99,000 so it is not a significant addition. He stated he feels for a project like this it would have been worthwhile to include the homeowners in the beginning of the project, and the \$13,000 that he is asking for could have been included if they had communicated with the homeowners early on. He stated the communication later on has been good, but there could have been better communication at the beginning of the project. He stated the \$31,000 over Budget is not insignificant, but he is asking for 30% over the Budget in order to do the project properly. He stated if there is erosion after the Add Alternative, then they will know that they have to do something even more significant. Dr. Mitchell stated he agrees with Mr. Pockl that stormwater management is going to be a bigger issue for the Township. He stated he feels they are going to run into a problem here, and adding the stones in the basket did not work before; and this is a similar idea with the stones after the plunge pool. He stated they are dealing with a 25% slope with no vegetation on it.

Dr. Mitchell stated he feels if it were someone on the Board's property, they would spend \$13,000 in order to do the job right. He stated if they do not reconsider this, they could end up with a 20' hole or channel 10' deep and 20' wide that they currently have on their property.

Mr. Ferguson asked if the additional work in the amount of \$13,000 would change the scope of the Easement that is before the Board this evening, and Mr. Pockl stated it would not. Mr. Ferguson asked Mr. Pockl to describe what the Alternative

would do in the scope of the project. Mr. Pockl stated currently the Base Bid does not include any matting on the 25% slope area which is approximately 20' away from the edge of the plunge pool. He stated they have some matting within that area. Mr. Pockl stated the intent of the design was to mimic what rainfall would be once it hits the top of the slope and goes down the slope. He stated they expect the water coming out of the plunge pool to have the same velocity as what a drop of rain coming down would have once it hits that slope. He stated there is no erosion now, and it rains on that slope. He stated they looked at the soil types, and they are very "robust" when it comes to being able to maintain vegetation. He stated there are also a lot of trees on the slope that maintain the slope. He stated they would not want to go in and cut down any of the trees as the trees are fairly large diameter trees, and their root system is extensive.

Mr. Grenier asked if they would have to cut down trees to do the installation, and Mr. Pockl stated in order to put the matting in, it would be by hand from the top of the 25% slope down to the edge of the Canal.

Ms. Tyler asked if they could move forward with the project, monitor the erosion over a period of time; and if they see that there is erosion, then authorize the Alternate. Mr. Pockl stated that would be his recommendation. He stated he believes they will finish the construction this year, and they are required to come back and re-vegetate once in the spring. He stated he would monitor it even beyond that time.

Mr. Ferguson stated the amount that they were talking about was as a Bid Alternate, but as a stand-alone item it may cost more money; however, it is still in the price range that they could get three quotes without having to Bid that out separately later on. Mr. Pockl agreed it would be below the threshold where they could get three quotes.

Ms. Tyler asked if they could not in awarding the Bid have the Base Bid work done, and bind the Contractor to the price of the Alternate after a passage of time because of the need to monitor the impact of the water run-off. Mr. Pockl stated there is a Contract time limit for completing the work, and that assures that the Township has the work done within an expected timeframe; and it also assures the potential Bidders to that the price they are giving has a "statute of limitations." He stated as long as it is within the Contract timeframe, they could do what Ms. Tyler is suggesting, but not anything beyond that. Mr. Pockl stated the only

stipulation within the specifications was a line item where they come back in the spring and re-seed. Mr. Grenier stated potentially they could wait until the spring and do an evaluation as they prep to come back and do the seeding; and prior to them doing the seeding, they could then authorize them to do the Bid Add-On. Mr. Pockl stated in that timeframe it would be a Change Order for installing matting on the 25% slope, and they could make the argument that there is a line item price for that, but that would involve a negotiation at that point.

Mr. Ferguson asked if he would be able to make an assessment in that short period of time whether it was necessary to do the Add Alternate, and Mr. Pockl stated he would. Dr. Mitchell stated his concern is that the ground is going to be frozen for some of that period of time, and they will not have the heavy rainfalls of summer. He stated if this is the route they are going to take, it would have to be considered in July and August after some of the very heavy rains we get in the summer. He stated he also feels photos should be taken after the work and then when it is re-inspected.

Ms. Tyler stated she would agree with this; and she added that while the Township will be monitoring this, she would strongly suggest that Dr. Mitchell take periodic photos as well from a set place on his property, and he can send them to the Township to show what he is seeing.

Dr. Mitchell stated he took photos this evening which he can show the Board; however, there is so much vegetation the phone pole he referenced was not as visible as he would have liked it. Ms. Tyler stated he should take pictures every month, and Dr. Mitchell agreed to do so. Dr. Mitchell stated he sent a video to Mr. Hucklebridge two years ago showing the amount of water that was coming down during a heavy shower. He stated it is 50 gallons a minute or more. He stated Mr. Pockl had indicated the soil was robust, and he agrees that it is a robust growing soil; however, if you were to stand on it, it would give way if you are on the slope, and there is nothing keeping it there. He stated the only reason why it is there is because of the canopy there during the spring and summer from the deciduous trees. Mr. Pockl stated he feels it is mostly a sandy loam so it drains well, but the erodibility factor for when it is wet is “right down the middle” and would be around .3 to .35.

Dr. Mitchell stated they have seen 20’ of erosion to the left, and that erosion increased significantly when they put up the house opposite his home. He stated he put in a “speed bump” at the bottom of his driveway in order to try and divert

some of the water that was coming down his driveway. He stated since the house across the street went up, the amount of run off has increased substantially; and while there was erosion before, the rate of that erosion has increased significantly.

Mr. Grenier asked if there are any unique characteristics between where there is significant erosion that Dr. Mitchell is seeing versus this location; and Mr. Pockl stated he does not believe that it would behave differently 20' over, and he feels the erosion that has occurred is now down to the bedrock, and it is making the side slopes more unstable.

Dr. Mitchell showed on a slide the size of the erosion area adding it is 20' deep. He stated there is tons of dirt that is in the Canal. Mr. Grenier asked if that "hole" was ever vegetated with trees, and Mr. Pockl stated he does not know that it was vegetated with trees; and this is just the path that the water took when it came from a concentrated discharge point down the slope. Dr. Mitchell stated the velocity of water down a 25% slope will be significant.

Mr. Grenier stated there is a plan in the short-term in the project to address the "hole," and Mr. Pockl agreed. Mr. Grenier stated there is also a plan to deal with the flow issues, and Mr. Pockl agreed. Mr. Grenier stated they will then make observations to see if the matting might be the right thing to do, or there may be something else they can do. Mr. Pockl stated moving forward with the construction project and monitoring it will give them better information on how to address an erosion problem if it were to occur, and Mr. Grenier agreed.

Dr. Mitchell stated it is obviously an evident problem, and they are addressing the 8% slope but not the 25%. Mr. Grenier stated they are implementing the project and making observations about how that effects the 25% slope. He stated if they are making significant changes to the flows and how the water behaves, they need to observe what impact that has. Dr. Mitchell asked that the Board consider if this were their property. Mr. Grenier stated he would do the project and make the observations post construction to see where the water is going to go since it is not a point discharge, and it is more of an irregular discharge over stone so they will see how it behaves. He stated once they know how it behaves, they can then address it more scientifically. Dr. Mitchell stated it is a point discharge over stone, and it is still a point discharge coming out of the surge tank. He stated it is a pipe. Mr. Pockl stated it is a 20' wide plunge pool. He stated coming out of the concrete structure there is a pipe at 1% and that is discharging into a pool of stone. Dr. Mitchell stated it is still a point source pipe coming onto a 20' width of stone. Mr. Pockl stated that is settling the water. Mr. Pockl stated the water will sit in the pool temporarily, and it will then fill up and spill over.

Dr. Mitchell stated if the pool can hold 500 gallons, and there is 50 gallons a minute flow, it would be ten minutes that it would come out. Mr. Pockl stated his point was that it is not a point discharge. Mr. Grenier stated it makes a difference when it comes to erosion whether it is a point or a level spreading. Dr. Mitchell stated it is spreading out on a 25% slope. Mr. Grenier stated he agrees with Mr. Pockl on this approach.

Mr. Lewis stated Dr. Mitchell had indicated that there was an exposed telephone pole, and he asked if that is in the 25% grade; and Dr. Mitchell stated it is not, and it is at the very top of it. Ms. Mitchell stated that is where all the utilities come in for the area. Mr. Lewis asked if there is some way he could mark the base of the pole, and they could then track if there is erosion over time. He stated the marker would provide a base line so they could see if the soil is eroding. Dr. Mitchell stated the pole idea would not work because they are going to put dirt over it and fill it in. He stated the Township could put in a series of poles along the 20', and he will take photos every month.

Mr. Pockl stated given the slope and the length, if it were to erode, it would occur at the bottom, and not the top. He stated over time it works its way up. He stated they could put in poles that would show no erosion at the top of the slope, but the velocity would be the highest at the bottom; and that is what they need to monitor which is why they will go down to the Canal towpath and review the bottom of the slope throughout construction and after construction. Dr. Mitchell asked if they will clear the vegetation, not on the slope, but further down so that they can actually monitor it. He stated he was only a few feet away from the pole, and it was difficult for him to see the pole because of the vegetation this time of the year. Mr. Pockl stated he would not recommend clearing any vegetation. Dr. Mitchell stated they should put in some demarcation where they can see down the bottom and also at the top and check the erosion at both locations so that they can monitor it over the years.

Mr. Ferguson stated Mr. Pockl is not a staff member, rather he is a consultant; however, Mr. Hucklebridge is a Township staff member, and he could put this on his regular schedule. Mr. Ferguson stated he does not have want Dr. Mitchell to have to tell him there is a problem; and he wants his staff to say there is a problem, and that they need to do something. Dr. Mitchell stated his concern is that he does not want to have to come back and say there is a problem like they had to do with Sandy Run. Ms. Blundi stated one of the reasons there are issues with Sandy Run is because the Township is in litigation about that. Mr. Pockl stated Sandy Run is also a \$1 million fix. Ms. Blundi stated as they move forward with this project, Mr. Hucklebridge will be assigned to routinely monitor this. Mr. Ferguson stated they will come up with a routine schedule which he will

coordinate with Mr. Pockl and Mr. Hucklebridge on how regularly they should be checking this whether it is once a week or once a month and more often in the wet months of the year. Mr. Ferguson stated if there is a problem and the Public Works Director and the engineer indicate that it is starting to erode, they will get it fixed. He stated this would not rise to the price that it would have to go out to Bid which is a time saver. Mr. Ferguson stated this will be put on a regular inspection schedule, and it could be included in the Public Work Director's monthly report on the status. He stated this would be a public document so Dr. Mitchell could look at it as well.

Dr. Mitchell asked if that is the direction that is taken could he be advised when the inspection will take place so he could accompany them on the inspection, and he noted he is usually available on Friday. Mr. Ferguson stated if they are going to regularly inspect this, they could pick a time that Dr. Mitchell would be available. Mr. Pockl stated it would make sense to monitor it after major storm events, and Dr. Mitchell agreed. Mr. Ferguson stated they could put it on a regular schedule to look at as well as immediately following heavy wet-weather events.

Dr. Mitchell asked if they look at it every quarter in 2020, would it still be looked at every six months after that. Mr. Ferguson stated it will be kept on a regular routine schedule unless there is a reason to pull it back. He stated if a period of time has gone by, and there is general agreement that they do not have to watch it as much, it could be pulled back.

Dr. Mitchell stated there is a FIOS cable by the existing phone pole, and they should make sure they do not sever that or else he would expect the Township to pay for that. Mr. Pockl stated there are Notes on the Plan to make sure that they do not do that; and if they do, he would expect the contractor to pay for it.

Ms. Tyler stated there is currently a Motion which they could vote on, and she has a secondary Motion with regard to monitoring.

Ms. Mitchell stated their concerns stem from the fact that they were unaware of this until they saw people walking around their property in the summer. She stated the original discussion was that they were cutting all the trees down, and putting down grass. She stated at this point she and her husband maintain the Township's easement or everyone would be going through the stop sign at Laurel which is also a bus stop.

Motion carried unanimously.

Ms. Tyler moved, Mr. Lewis seconded and it was unanimously carried to direct, through the Township Manager, the Public Works Department to monitor the erosion post project completion for not less than one year and upon wet weather events and otherwise, and to communicate with the Mitchell family on their observations.

#### PROJECT UPDATES

Mr. Pockl stated all the work for the 2019 Road Program except for minor punch list items has been completed. Ms. Blundi thanked Mr. Pockl for the installation of the reflectors on Creamery Road.

#### MANAGER'S REPORT

##### Authorize Advertising for Bids for 2019-2020 Leaf Collection Program

Ms. Blundi moved, Dr. Weiss seconded and it was unanimously carried to authorize advertising for Bids for the 2019-2020 Leaf Collection Program.

##### Award 2019-2020 Snow Removal Contract

Mr. Ferguson stated the Board received in their packet a memo from Mr. Hucklebridge with regard to contractors for salting and plowing. He stated every year the Township coordinates with the Consortium and neighboring Municipalities regarding generally-accepted rates for drivers, equipment, etc. He stated this year there were four separate contractors who responded, and they are all contractors returning from last year. Mr. Ferguson stated Mr. Hucklebridge has provided a summary sheet.

Ms. Blundi moved, Dr. Weiss seconded and it was unanimously carried to award the 2019-2020 Snow Removal Contract.

Mr. Ferguson stated he assumes they will have delivery of the new street sweeper shortly, and they hope to have it out sweeping soon. He stated both of the current sweepers are unreliable; and the hope is that they will be able to just have one street sweeper. He stated the 2019 Budget also included a new ten-wheel dump truck to replace one they have been having problems with, and he hopes that will be delivered in the next four to six weeks.

## SOLICITOR'S REPORT

Mr. Truelove stated the Executive Session commenced at 6:15 p.m. and litigation and Real Estate items were discussed as well as Contracts, confidential matters, and informational items.

### Approval of Resolution No. 2343 Approving Easement Agreement for Laurel Lane

Mr. Truelove noted the prior discussion about Laurel Lane, and this is the Easement Agreement which is a temporary Construction Easement to facilitate the construction which was just discussed at length.

Ms. Tyler moved, Ms. Blundi seconded and it was unanimously carried to approve Resolution No. 2343 Approving the Easement Agreement for Laurel Lane as outlined by the Township solicitor.

## ZONING HEARING BOARD MATTERS

With regard to the Nathaniel and Rebecca Shaffer Variance request for the property located at 10 Hillside Lane in order to permit construction of a patio resulting in greater than permitted impervious surface, Ms. Tyler moved, Ms. Blundi seconded and it was unanimously carried that the Township solicitor participate.

Ms. Tyler left the meeting at this time.

## SUPERVISORS REPORTS

Ms. Blundi stated as she noted earlier the EAC and the Township staff have put together a volunteer project for November, and they will be doing planting around the fields in coordination with PAA using Tree Bank money. She stated this is an opportunity to work together and improve a Township asset in a community-building way. She stated she hopes people will join them on that day. Mr. Grenier asked if this could be put on the Facebook page and the Website, and Ms. Blundi stated Ms. Tierney will be coordinating this. She stated PAA will be involved along with some Scouts. Mr. Ferguson stated the Township will be participating as well with employees and equipment.

Mr. Lewis stated the Farmland Preservation Corporation provided a draft of the 2020 Lease for legal review that was discussed by the Supervisors during the Executive Session.

Mr. Lewis stated the Planning Commission made a Motion to recommend the approval of a Mixed-Use Overlay Zoning Ordinance subject to considerations as noted by the Bucks County Planning Commission in their preliminary letter dated September 23, 2019 with specific consideration for density as set forth in Section 2.d. of the Bucks County Planning Commission letter as well as a provision that the Overlay not be extended to more than a quarter mile radius as set forth in the proposed Ordinance, and to prioritize the bonuses to fully reinforce that they are consistent with Township priorities. He stated that passed by a four to one vote.

There being no further business Ms. Blundi. moved, Dr. Weiss seconded and it was unanimously carried to adjourn the meeting at 10:05 p.m.

Respectfully Submitted,

Kristin Tyler, Secretary