

Radnor Township
Stormwater Management Advisory Committee (SWMAC)
Agenda
7:00pm, Thursday, December 8, 2016



1. Call to Order.
2. Pledge of Allegiance.
3. Review / approve meeting minutes of November 10, 2016 SWMAC Meeting.
(5 minutes)
4. Public comment.
(15 minutes)
5. Update on Banbury Stormwater Management System design from T&M.
(15 minutes)
6. Discussion of potential Stormwater Ordinance revisions and possibly forming SW Ordinance subcommittee.
(40 minutes)
7. Discussion of Stormwater Administrator proposals and recommendation to BoC.
(15 minutes)
8. Old/New Business – Update on current repair projects, Township Wide Assessment update (CH2M), Storm Sewer Inspection/TV status, Mill Dam legal research, North Wayne Train Station/SEPTA.
(30 minutes)
9. Set the date and time for the next meeting and adjourn.

ATTENDEES: SWMAC: Paige Maz, Regina Majercak, Paul Burgmayer, Heather Gill,
Joe Schanne, Charles Boschen
CH2M: Courtney Finneran

PREPARED BY: CH2M

MEETING DATE: November 10, 2016

SUBJECT: November 2016 meeting

YouTube link: <https://www.youtube.com/watch?v=BJSOEOi1KNk>

Review of Previous Meeting Minutes

- OCTOBER 13, 2016 and OCTOBER 27, 2016 SWMAC meeting minutes – approved with several minor typographical edits

Public Comment

- No public comment

Discussion of SWMAC Budget Presentation to Board of Commissioners (BOC)

- Paul presented to BOC on 11/7/16
 - BOC had no issues except that the SWMAC should be spending stormwater funds more expeditiously
 - BOC is interested in capital projects; SWMAC will seek to amend budget in January 2017 once updated costs are available for the project currently under design

Old/New Business – RFP for Stormwater Administrator 2017-2018, update on current Repair Projects, Highview Drive status, Storm Sewer Inspection/TV status, SWM Ordinance Revisions, Mill Dam legal research, North Wayne Train Station/SEPTA

- RFP for SPA 2017/2018 – 2-year contract out for proposals
- Storm Sewer Inspection is 50% complete. Steve to provide the linear length. Paige would like to see what was awarded (contractor, award amount, and end product)
- North Wayne Train Station – legal access issue, so project is in limbo. Regina stated that the SWMAC should consider a different project at that location (e.g. rain garden), and remove the \$100,000 from 2017 and develop alternatives. Joe pointed out that it would be best to wait until the projects for the Township Wide Assessment (TWA) are listed, and use the money for that location. SWMAC recommended to pull that project and use the funds for a different project that does not have access issues. Paul asked if the project was being modeled or if is being considered in the project.
 - SWMAC recommended that no further money be spent until the results of the TWA are released and requested that CH2M include it in the project assessment.
- Regina noted that the Planning Commission asked about timeline and status on the Ordinance. Steve asked CH2M to provide an ordinance review, and Courtney reported that CH2M would complete that in a 4-6 week timeframe. SWMAC wondered why CH2M was asked to review Gannett Fleming's review and requested additional information.
 - Paul asked what is the SWMAC's with respect to the ordinance update, and Regina preferred to have a greater role.
 - Joe recommended Courtney documented questions for Steve/Dan.
 - Joe asked why are we reviewing the Ordinance again, and what is the timeline for the updates?

- Pending response to status, the SWMAC will determine next steps to accelerate the implementation.
- Highview Outfall – when is Gannett Fleming going to provide design-based cost estimate as the \$300,000 placeholder is quite high. Can Gannett Fleming provide a schedule? Does the \$42,177 design fee include permit costs?
- Maplewood Ave/Mill Dam – Joe prefers to remove this project. John Rice asked to review the dam records. SWMAC requested status update, however, Joe is unsure why the SWMAC is funding it since he feels it is a road repair.
- Castlefinn Lane Culvert – Joe noted that this is not a big stream, the project is a bridge repair along with a full road repair. The SWMAC feels that any paving project should not be on this list.
 - The SWMAC would like to know what the project entails. Provide a summary including the budget impacts.
 - The SWMAC would like to know what the process is for Steve's discretionary use of stormwater budget and how they are to be involved with decision making.
 - The SWMAC would like Steve to provide a monthly report of anticipated project costs so they can properly plan for the budget. In the event of an emergency, then Steve should send an email to SWMAC.
- Township Wide Assessment – please provide an updated cost to date amount
- Wawa/Banbury Way – Can Dan/Steve provide the SWMAC an update?
 - The SWMAC was interested in having the consultants provide time for a "case study" presentation at the 12/8 open house to the public
 - Provide an overview of the process from planning → concept → design → final design to help the public understand.

Township Wide Assessment (TWA) - Update

- CH2M is continuing to model the projects, however, we would like to get the public input before going too far.
- Dan reviewed plans for the Church of the Saviour detention basin and determined that the 72-in pipes under the basin provide significant storage volume and that additional modification may not be required. He will be further exploring that as we finalize the project development task.

Township Wide Assessment (TWA) – Open House

- Is there any issue with full SWMAC attendance at the event? Regina felt that because it was an advertised public event, it should not matter if all SWMAC members were in attendance. Joe assumed it was another meeting, so why would it matter? Regina recommended that it be an informational meeting with no voting taking place.
- CH2M will provide draft invitation for electronic delivery ASAP.
- CH2M will provide a draft PowerPoint for SWMAC input ASAP.
- The presentation section will be approx. 30 minutes allowing for Q&A. However, the SWMAC did not feel the need to allow for a group Q&A session. CH2M will include a "parking lot" for questions to be answered later. There will be no report-back session at the conclusion of the meeting. Consider having a rolling ppt on the slides. Maps should include landmarks because streets are not as helpful.
- Station 1 - Flooding Impacts
 - Public would put a dot on a map corresponding to a location where they have experienced flooding. Regina recommended that the color could be related to frequency and not allow the public to add dots based on depth or amount of rain. A separate form would allow for the public to provide additional detail.
 - The model would not necessarily be calibrated with this information. Instead, this information would help provide qualitative input.
- Station 2 -Stormwater solutions

- SWMAC felt that educating the public was helpful, but that it could get very complicated very quickly
- SWMAC was interested in listing out Pros/Cons of various solutions, however, if the public was not making any decisions (as was determined, below) then the Pros/Cons don't matter as much.
- SWMAC was wondering if we are asking the public to make a decision on anything. CH2M clarified that we had limited locations for projects due to ownership/etc.
- CH2M noted that it was difficult to ask the public to put a value on one project type over another, and therefore that this station was more education oriented.
- Joe: education of the project types is important. Philadelphia Water Department has educational document that could be utilized or adapted.
- Can use this time to talk about Residential Rebate Program
- Regina question: rather not see porous pavement projects b/c the Community can go see existing examples in Radnor. Regina prefers to see a commercial retrofit before/after project example that the community may not be as familiar with.
- Station 3 – Community Vision
 - Consider replacing low maintenance with aesthetics; expand on stream protection category
 - Consider adding images and additional text
 - Poster would allow public to add Top 3 values and Lower 3 values
 - Handout would allow public to rank values
 - Regina felt it would be duplicative, however, CH2M recommends both mechanisms
- Logistics
 - The SWMAC would feel a successful outcome would be 100 attendees
 - CH2M will prepare a draft Press Release flyer for an e-blast on Friday 11/18
 - SWMAC preferred that the open house would be one three-hour workshop, with 2 presentations. The group agreed to schedule the meeting 6pm-9pm

Discussion of MS4 Permit Scope / Fee Proposal

- CH2M provided a high-level overview of the changes to the proposal based on conversations with Steve Norcini.
- The SWMAC has committed to supporting the public component of the MCMs (PEOP and PIIP) and Heather offered to bring in example outreach plans. The SWMAC will coordinate with Steve to determine next steps on the MCMs, specifically ones that involve training of the Township Staff (outfall dry weather screening, for example).
- Action Item: Heather agreed to set up a meeting with Steve to discuss MCMs
- SWMAC requested to consider using their monthly meetings as the venue for the two (2) PRP-required public meetings in an effort to reduce costs

Next SWMAC meeting: 12/8/16 (Radnorshire room)

Action Items

- CH2M to follow up with Steve on several questions summarized above *(Note: completed on 11/14/16)*
- SWMAC (Heather) to set up a meeting with Steve to discuss MCMs

**Radnor Township
Public Works &
Engineering
Departments**

Memorandum

To: Stormwater Management Advisory Committee
From: Stephen F. Norcini, PE *SFN*
CC: Robert A. Zienkowski, Township Manager
William M. White, Finance Director
Date: 12/6/2016
Re: Response to Stormwater Management Advisory Committee, as Noted in the Draft Meeting Summary from the November 10th Meeting

After reviewing the draft meeting notes of the November 10, 2016, Stormwater Management Advisory Committee (SWMAC) meeting, I noted the questions posted. Most, if not all of these have been answered in emails to the SWMAC, but thought you may wish to have them in one document. Please see below (responses in red):

Old/New Business – RFP for Stormwater Administrator 2017-2018, update on current Repair Projects, Highview Drive status, Storm Sewer Inspection/TV status, SWM Ordinance Revisions, Mill Dam legal research, North Wayne Train Station/SEPTA

- RFP for SPA 2017/2018 – 2-year contract out for proposals
- Storm Sewer Inspection is 50% complete. Steve to provide the linear length. Paige would like to see what was awarded (contractor, award amount, and end product) *The contract award amount was \$109,000 (as recommended by SWMAC to BOC, and awarded by the BoC). To date there has been 33,549 linear feet of storm sewer cleaned and televised. Billing to date is \$58,000. The company performing the work, TLC Sewer and Drain, is now moving to the Garrett Hill/Conestoga Village area. The end product (deliverables) are the videos and paper reports of the televising. These reports are to be reviewed (SFN), and a project list will be prepared (SFN) from the videos. The project list will be provided to the Township Manager and SWMAC* North Wayne Train Station – legal access issue, so project is in limbo. Regina stated that the SWMAC should consider a different project at that location (e.g. rain garden), and remove the \$100,000 from 2017 and develop alternatives. Joe pointed out that it would be best to wait until the projects for the Township Wide Assessment (TWA) are listed, and use the money for that location. SWMAC recommended to pull that project and use the funds for a different project that does not have access issues. Paul asked if the project was being modeled or if is being considered in the project.
 - SWMAC recommended that no further money be spent until the results of the TWA are released and requested that CH2M include it in the project assessment. *I respectfully request this item be provided in the form of a memo from SWMAC. I will then take this to the Township Manager. The Board of Commissioners authorized this project, and the BoC's authorization is required to cease the project.*
- Regina noted that the Planning Commission asked about timeline and status on the Ordinance. Steve asked CH2M to provide an ordinance review, and Courtney reported that CH2M would

complete that in a 4-6 week timeframe. SWMAC wondered why CH2M was asked to review Gannett Fleming's review and requested additional information.

- Paul asked what is the SWMAC's with respect to the ordinance update, and Regina preferred to have a greater role.
- Joe recommended Courtney documented questions for Steve/Dan.
- Joe asked why are we reviewing the Ordinance again, and what is the timeline for the updates?
- Pending response to status, the SWMAC will determine next steps to accelerate the implementation.

The email sent to SWMAC on 11/28/16 outlined guidance from the Board of Commissioners on this topic. There is a memo, along with Commissioner Curley's memorandum, as part of the packet for the 12/8/2016 SWMAC meeting agenda.


- Highview Outfall – when is Gannett Fleming going to provide design-based cost estimate as the \$300,000 placeholder is quite high. Can Gannett Fleming provide a schedule? Does the \$42,177 design fee include permit costs? *The \$42,177 does include permitting fees that are required for design/approval. The cost estimate is to be provided this month (December).*
- Maplewood Ave/Mill Dam – Joe prefers to remove this project. John Rice asked to review the dam records. SWMAC requested status update, however, Joe is unsure why the SWMAC is funding it since he feels it is a road repair. *The solicitor's office is investigating this issue.*
- Castlefinn Lane Culvert – Joe noted that this is not a big stream, the project is a bridge repair along with a full road repair. The SWMAC feels that any paving project should not be on this list.

This was not a paving project; this was an emergency stormwater culvert repair.

- The SWMAC would like to know what the project entails. Provide a summary including the budget impacts. *The arch ring, as well as part of the arch of the culvert, collapsed. The street is built overtop the arch; when the arch collapsed, the street that it was supporting collapsed. The project entailed the re-building of the arch, arch ring, and patching the street above the arch.*
- The SWMAC would like to know what the process is for Steve's discretionary use of stormwater budget and how they are to be involved with decision making. *The Director of Public Works has no discretionary use of the Stormwater Fund. This was an emergency repair of a stormwater culvert, which caused a road closure. Items of this type are discussed with the Township Manager and Finance Director, with direction coming from that meeting. Township Code, §5-51(B)(7) reads, in part, as follows: "Emergency repairs or service and equipment required by emergency conditions. Approval shall be given by the Manager or Finance Director and the department head involved in the emergency..."*
- The SWMAC would like Steve to provide a monthly report of anticipated project costs so they can properly plan for the budget. In the event of an emergency, then Steve should send an email to SWMAC. *Will do.*

**Radnor Township
Public Works &
Engineering
Departments**

Memorandum

To: Stormwater Management Advisory Committee
From: Stephen F. Norcini, PE 
CC: Robert A. Zienkowski, Township Manager
Date: 12/6/2016
Re: Board of Commissioners Directive – Stormwater Management Ordinance

At the regularly scheduled Board of Commissioners meeting on November 28th, 2016, Commissioner Curley addressed the topic of guidance in regards to 2005 Stormwater Management Ordinance amendments was discussed.

As a follow up to my email of 11/28 (including attachment), I am providing the outcome of that meeting for the agenda. Attached is a memo from Commissioner Curley, that was part of the Board of Commissioners packet. The Board passed a motion accepting the outlined process, dates, objectives and goals as outlined in the memorandum, in regards to guidance on the Stormwater Management Ordinance amendments.

There was also an additional item, proposed by Commissioner Schaefer, i.e. Number 5 (paraphrasing): Asking the SWMAC to identify other significant oversights/short comings/deficiencies in the existing SWM Ordinance, and provide solutions to those oversights, etc., that was part of the motion passed.

Please find the memorandum attached.

From: Don Curley, Ward 6 Commissioner

TO: BOC

Via: Radnor Township

Date: 11/2/16

Subj: Stormwater Ordinance

The Township has discussed modifying its stormwater (SW) ordinance for years. As I see it, the goal for revision is to propose changes to the ordinance to address inefficient, counterproductive, ineffective, or incomplete applications of the ordinance.

If we proceed, it is important that we move from general to particular and that we select manageable and tangible changes. Accordingly, I propose that:

1. The BOC (by motion) adopt goals to shape the prospective changes that the Township may select. Alternatively, the BOC could choose no action.
2. The BOC (by motion) task the SWMAC to identify zero (no action) to three or four ways that the Township could modify its Stormwater ordinance to achieve those goals.
3. The SWMAC (by motion) propose its recommendations to the BOC. There commendations should be in paragraph form, received NLT December 2016, conceptual in nature, and limited to a few sentences or short paragraph per recommendation.
4. In January 2017; the Commissioners should review the recommendations from the SWMAC as well as any other recommendations it sees as appropriate and propose up to four conceptual changes.
5. In January or February 2017; the BOC (by motion) shall direct the staff to prepare text changes to the ordinance to reflect the conceptual changes that the BOC identified as suitable.

Obviously, we can set the schedules we see fit or set no schedule all.

Here are the four most common concerns that I have heard during my seven years as Commissioner. Accordingly, I propose the following goals:

1. **Premise 1** – The existing ordinance ensures that post construction conditions match pre construction conditions (aka maintain status quo) but citizens want improvement (increase WQ, reduce peak rate, reduce runoff, reduce flooding). **Goal 1** - Evaluate and identify ways to make the ordinance improves management instead of maintaining SW conditions in the current form. For example, if the Township used meadow conditions (or a percentage of meadow conditions) as a baseline instead of existing conditions then each SW facility constructed would provide SW benefit instead of maintaining the status quo.
2. **Premise 2** – Some citizens complain about the inefficiencies of the ordinance (ex: \$3000 patio with \$6000 and 4 months for engineering approval). Others complain that “pits” and rain gardens cost a fortune to homeowners yet provide little benefit. **Goal 2**- Evaluate if there are inefficiencies in the current ordinance (a.k.a.

where and how do the Township, citizens, and land owner apply resources without sufficient benefit to justify the expenditure) and propose remedies.

3. **Premise 3** – My observation is that the ordinance incents activity in greenspace and does not reward reuse or recycling of footprint or impervious cover. For example, a resident proposing 1501 SF of new construction has expensive new SW obligations even if that resident proposes no new IC. **Goal 3** - Evaluate if the ordinance incents activity in greenspace and does not reward reuse or recycling of footprint or impervious cover and identify ways to make the ordinance increase the incentive to reuse existing IC rather than replace existing pervious cover.
4. **Premise 4** – Some citizens have indicated that the ordinance does not adequately support the Township's compliance with its MS4 permit. **Goal 4**- Evaluate if the ordinance does not support our current or expected MS4 permit and identify ways to make the ordinance more supportive of MS4 permit requirements than it currently is.

At the first meeting in November, I will propose that the Township adopt these goals and this schedule.

| Project Description | Status | Type | Watershed | Estimated Expenditure FY 2016 | YTD (Actual) Expenditure FY 2016 | Estimated Expenditure FY 2017 | Estimated Expenditure FY 2018 | Estimated Expenditure FY 2019 | Estimated Expenditure FY 2020 | Estimated Expenditure FY 2021 | December 2016 Update |
|---|--------------------|---------------------|-----------------|-------------------------------|----------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|---|
| Maplewood/Odoriso Park Outfall | Problem identified | Repair/Maintenance | Darby Creek | | | | | | | | Update from Steve Norcini: Back in November of 2015, the issue of the Maplewood outfall, specifically the eroded swale, was brought forth to the SWMAC. As noted, the resident had safety concerns, and had contacted Solicitor Rice on the issue. The house was sold and the new owner has similar safety concerns. The eroded swale is also an issue for the adjacent park, Odoriso. In the 5-year SWMAC budget presented to the Board of Commissioners, it is noted that the Maplewood Outfall Project is slated for beyond 2021. I am requesting the SWMAC revisit this project, for possible action in 2017. |
| Highview Road Outfall | Problem identified | Repair/Maintenance | Gulph Creek | \$ 42,177 | \$ 1,620 | \$ 300,000 | | | | | Update from Gannett Fleming: Design is about 50% complete. The Township was able to provide us with an old plan of the site which included additional information regarding the location of the existing storm sewer between Highview and the outlet structure. We anticipate providing Steve with plans and specifications for review before the year ends. ::: The fee for this project includes permitting fees that are required for design/approval. The cost estimate will be provided sometime in December. |
| Maplewood Ave/Mill Dam Embankment | Report completed | Repair/Maintenance | Darby Creek | | | | | | | | The Township Solicitor is still reviewing the question of legal responsibility for making repairs to the abandoned pipe through the dam |
| Castlefinn Lane Culvert - Emergency Repair | Completed | Repair/Maintenance | Meadowbrook Run | \$ 18,936 | \$ 18,936 | | | | | | Update from Steve Norcini: This was an emergency culvert repair project. The arch ring, as well as part of the arch of the culvert, collapsed. The street is built overtop the arch; when the arch collapsed, the street that it was supporting collapsed. The project entailed the re-building of the arch, arch ring, and patching the street above the arch. |
| Septa Train Station - Authorizing Gannett Fleming to provide design services for stormwater management at the N. Wayne Train Station (north side) | Design | Capital Improvement | Gulph Creek | \$ 30,000 | \$ 1,648 | \$ 100,000 | | | | | Update from Gannett Fleming: 1. Amtrak Legal requested additional information to be included on a plan to be used in an exhibit for the access agreement. GF will need to revise the exhibit and provide the additional information. This will be used by Amtrak to finalize their draft agreement. 2. The infiltration testing subcontractor called to inform GF that the Rail Road Protective Liability Insurance (\$2,000,000 combined single limit per occurrence and \$6,000,000 annual aggregate) and Pollution Liability Insurance requirements (\$5,000,000 per occurrence and \$10,000,000 annual aggregate) will require his company to re-write their entire insurance policy and carry the new policy for beyond 30-days (at least one year). This would be extremely costly to the subcontractor and/or the Township if the cost is passed through. Subcontractor expected to provide additional information on the limitations in obtaining these specific certifications. GF inquired with SEPTA if certain requirements could be waived due to the nature and location of the testing, but SEPTA maintains that it is a requirement for the Right-of-Entry. ::: Request from Steve Norcini: if the SWMAC would like to put this project on hold for now (while it is evaluated as part of the Township Wide Assessment), they should draft a memo to the Board. |
| Banbury Way Flood Mitigation Project: design | Design | Capital Improvement | Ithan Creek | \$ 95,236 | \$ 5,634 | \$ 1,200,000 | | | | | Steve Norcini and Daniel Wible met with T&M to discuss the design status on 12/6/16. Design is approximately 70% complete and is expected to be 100% complete in January or February 2017. The preliminary design has slightly greater storage capacity than the conceptual design and is approximately half the cost (though that cost may increase based on the 12/6/16 meeting). In general, the design is similar to the conceptual plan and includes closure of one of the turning lanes onto Windsor in order to implement a bioretention system and improve traffic flow. The design includes several cells of plastic storage crates, some of which extend into private property thereby requiring an easement. Steve has requested that the design be modified to minimize the need for easements. Several existing utilities will have to be relocated for this project. T&M will present the preliminary design to the SWMAC at their 12/8/16 meeting. |
| Township-wide SW Eng. Assessment: Authorization for CH2M RFP & Approval for Professional Services for an Assessment of the Gulph Creek, Meadowbrook Run, and Darby Creek Watersheds | On-going | Eng & Admin | Various | \$258,107 | \$176,911 | | | | | | CH2M progress: continued to develop/refine existing conditions model; continued modeling potential flood mitigation projects and typologies in the priority problem areas; budget is approximately 90% spent; final results / deliverables (model files, maps, project summary tables, etc.) will be submitted in January 2017 |
| Stormwater Administrator: Authorization to Contract for Program Billing, GIS, and Professional Eng. Services | On-going | Eng & Admin | Various | \$80,840 | \$76,068 | \$ 80,000 | \$ 80,840 | \$ 80,840 | \$ 80,840 | \$ 80,840 | Proposals for the 2017/2018 Township Stormwater Program Administrator were due on 11/22 (hard copies by 11/28) |
| MS4 Compliance (2016 Annual Progress Report and MS4 Permit Support for New DEP Requirements) | On-going | Eng & Admin | Various | \$ 55,040 | \$12,041.96 | \$ 122,362 | \$ 5,000 | \$ 5,000 | \$ 5,000 | \$ 5,000 | On 11/9/16, CH2M submitted its revised proposal to plan for and implement new MS4 permit requirements; the Township is looking for a recommendation from the SWMAC in the very near future. |
| Cleaning, Televising, and Mapping of Storm Sewer in Radnor Township | On-going | Repair/Maintenance | Various | \$ 109,000 | \$56,451.36 | \$ 50,000 | \$ 50,000 | \$ 50,000 | \$ 50,000 | \$ 50,000 | Update from Steve Norcini: The contract was awarded to TLC for \$109k. To date, the work is around 58% percent complete (33,549 LF). The purpose is to clean storm sewers and use the information to prepare a list of pipes/inlets that need replacement. This effort will clean and televise approx. 10-14 miles of storm sewers. TLC is now moving to the Garrett Hill/Conestoga Village area. The end product will be videos and paper reports of the televising. Steve will review this information and prepare a project list that will be provided to the Township Manager and SWMAC. The Township has well over 140 miles of storm sewer. The intent going forward is not to clean and televise the entire Township, but known problem areas, or areas where we would like to have more information. I would recommend we push the next portion of this project out to 2018 or 2019. |
| North Wayne Basin - Inspect/Repair Existing SW System based on Township-wide Study results. Pending BOC approval | Problem identified | Repair/Maintenance | Gulph Creek | \$185,000 | | | | | | | CH2M presented its N. Wayne basin modeling results to the Board of Commissioners on 11/14/16; CH2M will return to answer the Board's (and public's) questions on this analysis in January 2017 |

| Project Description | Status | Type | Watershed | Estimated Expenditure FY 2016 | YTD (Actual) Expenditure FY 2016 | Estimated Expenditure FY 2017 | Estimated Expenditure FY 2018 | Estimated Expenditure FY 2019 | Estimated Expenditure FY 2020 | Estimated Expenditure FY 2021 | December 2016 Update |
|---|----------|---------------------|-----------|-------------------------------|----------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|---|
| Stormwater Management Ordinance Update | On-going | Eng & Admin | n/a | \$5,000 | \$4,805.00 | | | | | | In a memo dated 11/2/16, Commissioner Curley summarized his recommended approach for updating the Township's Stormwater Management Ordinance (SWMO). Commissioner Curley proposed the following timeline: SWMAC proposes its recommendations (conceptual, brief) to the Board no later than Dec 2016 (Commissioner Curley suggested that the SWMAC identify up to 4 specific ways the SWMO could be modified); the Board will review the recommendations from the SWMAC (and others) in Jan 2017; and then in either Jan or Feb, the Board will direct Township staff to prepare text changes to the SWMO. At the 11/28/16 Board of Commissioners meeting, the Board passed a motion accepting the process, dates, objectives, and goals as outlined in Commissioner Curley's memo. The Board also asked the SWMAC to identify other significant oversights and/or deficiencies in the existing SWMO, and suggest solutions to those. |
| TBD Flood Mitigation Projects (Design and Construction) | Planning | Capital Improvement | Various | | | \$ 200,000 | \$ 1,400,000 | \$ 700,000 | \$ 700,000 | \$ 700,000 | |
| Total costs in a year | | | | \$ 1,299,152 | \$ 771,377 | \$ 2,063,862 | \$ 1,826,026 | \$ 968,778 | \$ 930,755 | \$ 1,040,884 | |
| Repair costs | | | | \$ 760,369 | \$ 466,256 | \$ 351,500 | \$ 330,186 | \$ 172,938 | \$ 134,915 | \$ 245,044 | |
| Repair % of total | | | | 59% | 60% | 17% | 18% | 18% | 14% | 24% | |
| Yearly revenue from Stormwater Fee | | | | \$ 1,010,500 | \$ 1,092,439 | \$ 1,010,500 | \$ 1,010,500 | \$ 1,010,500 | \$ 1,010,500 | \$ 1,010,500 | |
| Other Revenue | | | | | | \$ 100,000 | | | | | |
| Previous balance | | | | \$ 2,267,442 | \$ 2,267,442 | \$ 1,978,790 | \$ 1,025,428 | \$ 209,902 | \$ 251,624 | \$ 331,369 | |
| End of year balance | | | | \$ 1,978,790 | \$ 2,588,505 | \$ 1,025,428 | \$ 209,902 | \$ 251,624 | \$ 331,369 | \$ 300,985 | |