ATTENDEES: SWMAC: Heather Gill, Paige Maz, Regina Majercak, Paul Burgmayer

Township: Stephen Norcini

CH2M: Daniel Wible

PREPARED BY: CH2M

MEETING DATE: November 12, 2015

SUBJECT: November 2015 meeting

YouTube link:

https://www.youtube.com/watch?v=Nt8HDyLNGxk&index=9&list=PLWSgQZEOk8cWuk of0zq2i9J-kzoKsYZx

Review of Previous Meeting Minutes

October 15, 2015 SWMAC meeting minutes – approved

Public Comment

- Dan Meier (Environmental Advisory Council) presented several ideas related to stormwater:
 - Briefly discussed Sustainable Parks Policy (part of Greenhouse Gas Reduction Plan);
 exploring grant opportunities to do a pilot study
 - Fenimore Woods; a resident recently expressed concern about algae in the pond; there are several failing "reed" beds (asphalt-lined, completely silted in); more water cycling is likely needed in pond
 - Dan is on the steering committee of Radnor Bird Town (Audubon Society program; promotes backyard bird habitat); working with urban planner who specializes in sustainable backyards/landscapes; exploring stormwater-related ideas that will likely be presented at a future SWMAC meeting
 - EAC is looking to add another member; Radnor Bird Town is also looking for volunteers

Ithan Creek Watershed Assessment Recommendations/Solutions by CH2M

- Daniel presented the concept designs for the parking lots at Runnymede Ave (School district-owned)
 and S. Wayne Ave (Township-owned)
 - Daniel first presented a brief update on the Banbury/Francis/Windsor concept design, showing the updated plans, cost estimates, and flood reduction benefits associated with the 3 storms analyzed (5-year, 1-hour; 10-year, 1-hour; and 25-year, 1-hour)
 - Daniel presented the draft concept designs for the Runnymede Ave parking lot, the S.
 Wayne Ave parking lot, and the Radnor Memorial Library parking lot
 - The concept designs include underground storage/infiltration systems, bioswales, a tree infiltration trench, and several new inlets and diversion structures; the modeling and cost estimates were still being developed at the time of the meeting and will be finalized for the December SWMAC meeting
 - Steve noted that the library is planning an expansion and full renovation, which will entail
 extending part of it over its parking lot (http://www.radnorlibrary.org/building-project/);
 therefore, any stormwater project in the vicinity of the library must be coordinated with the
 library's plans (Note: Steve reached out to library staff on 11/20 to let them know about the
 concept plan and request that they coordinate with CH2M.)
 - Steve asked if CH2M could provide a summary of actual storms that the Township has experienced in recent years

- Regina noted that there are several inlets near Runnymede Ave that are known to have flooding issues (i.e. not functioning very well)
- Paul asked why areas upstream of the Runnymede / S. Wayne parking lots were not being explored for stormwater controls; that area is mostly residential with very limited publicly owned parcels

Old/New Business & Stormwater Budget Discussion

- Steve noted that items that are on the approved 5-year stormwater budget are considered "approved"
 - It is generally understand by Township staff and the Board of Commissioners that there is some "fluidity" with the 5-year stormwater budget and that significant future expenditures for stormwater projects will not be fully known until after additional flood studies are conducted in early 2016
 - According to Steve, it is acceptable at this time to include budgetary "placeholders" for certain types of projects (e.g. flood control projects or repairing failed systems)
- Steve presented on several stormwater-related safety concerns
 - Highview Drive Outfall
 - Gulph Creek watershed
 - Deeply eroded swale from storm sewer outfall; significant safety issue
 - Momenee surveyed swale in 2002
 - Several potential solutions: reduce runoff volume, pipe the outfall, plantings/check dams/armor/micro pools, re-shape swale, all of the above
 - Outfall is on private property; Township's pipe and therefore Township's responsibility to maintain; no easement has been found to date (likely a prescriptive easement)
 - Steve recommended funds for design, permitting, and bidding documents in 2016 (estimated fee \$45,000); construction in 2017
 - Regina noted that this should fall under "repairs and upgrades"
 - If no existing easement is discovered, permanent and construction easements will be sought prior to starting work
 - Heather noted that the forthcoming flood study for the Gulph Creek watershed may yield other potential solutions that should be considered in addition to smaller-scale temporary fixes
 - Maplewood Ave Outfall
 - Darby Creek watershed
 - Eroded swale roughly 4 feet deep; partially in private backyards and partially in Odorisio Park; not as deep as Highview Drive outfall swale
 - No easements found/recorded
 - Several potential solutions: reduce runoff volume, pipe the outfall, plantings/check dams/armor/micro pools, re-shape swale, all of the above
 - Forthcoming flood study for the Darby Creek watershed may yield other potential solutions that should be considered; however, Steve noted that there is a real safety concern of the residents
 - Steve recommended funds for design, permitting, and bidding documents in 2016; construction in 2017

Mill Dam

- Darby Creek watershed
- Approximately 2 years ago, Steve noticed that Maplewood Road was settling
- Steve noted that this is a potentially significant safety concern and recommended moving forward with design in 2016 and construction in 2017; Steve noted that of

- the 3 safety concerns discussed, this is the highest priority and that it is clearly the Township's responsibility
- Gannett Fleming prepared a report that concluded that the observed settling is a result of unfiltered seepage along an abandoned 33-inch riveted outlet pipe that is in the dam embankment; costs were estimated as follows:
 - 2016: \$45,000 for permitting, design, and bidding documents
 - 2017: \$200,000 for construction (removal and backfill of abandoned pipe) and \$20,000 for inspection (daily, all day)
- Dam hazard classification unknown, but Steve noted that there is a safety plan in place for downstream residents
- Regina asked if the pipe could be filled instead; Steve opinion that flowable fill may not be an adequate solution as it may not completely fill the void
- Regina recommended a higher level budgeting approach that would assign budgets by category (e.g.
 flood reduction projects or repairs/updates) since budget allocations for specific projects cannot be
 defined at this time; this will allow the stormwater budget to remain more flexible and malleable as
 additional information comes to light
- Regina also noted that Midland Ave should not be specified in the budget at this time since there is not yet a concept developed
- Regina satisfied with high level analysis conducted for Ithan Creek and believes that it could work well for the other watersheds; according to Regina, flooding in Township is not systematic, but localized
- Steve noted that additional data is needed for more detailed flood studies; Steve has asked CH2M for a proposal to integrate Township's storm data into GIS platform
- SWMAC and Daniel discussed the pros and cons associated with more detailed data collection and modeling for the Ithan Creek watershed and the other 3 watersheds in the Township; Steve noted that a more generalized flood study can effectively highlight flooding "hot spots" that can then be further analyzed with more detailed modeling, and that projects would be further refined in the design phase
- Daniel noted that his understanding of Commissioner Curley's request was for a visual representation of the reduced flooding area associated with each storage option
- SWMAC, Steve, and Daniel discussed and enacted various updates to the 5-year stormwater budget, including the following:
 - Mill Dam repairs added to 2016 budget
 - No 2016 costs for miscellaneous repairs/upgrades to stormwater infrastructure
 - Wayne Train Station costs pushed back one year (construction in 2017)
 - Flood reduction projects lumped into one line item (including N. Wayne Basin and other identified Ithan Creek concepts, including Banbury/Francis/Windsor); Pipe connection to the Radnor Middle School stormwater system was kept separate (Steve noted that Gannett Fleming has provided a proposal for designing this pipe)
 - Cost of stormwater fee billing was significantly reduced since it will continue to be handled by Township staff

Discussion of ODP Incentive Program

- Paul gave a presentation on a potential ODP (Other Developed Properties) credits program, in which he discussed:
 - Possible approaches: do nothing, ODP credit program, ODP grant program, ODP grant/credit program, and "target" credits program
 - Issues to consider: fee reduction (partial is preferred) and inspection/enforcement (common with incentive programs, but can add administrative burden)

- Previously presented ODP credit program proposal consisted of 3 components: credits granted (volume, existing structure, or condo owner), application process, and maintenance requirements
- Examples of grant/credit programs in other communities (Lancaster, PA, Philadelphia, PA, and Syracuse, NY) were briefly discussed
- Potential ODP grant program: available to all ODPs on a first-come first-served basis; grants/rebates offered to selected properties where stormwater improvements would have the most benefit to the Township; grants used in a predetermined manner as set by a policy decision (design and/or construction and/or maintenance)
- Targeted credits: approach ODPs that are strategically located from a stormwater control
 perspective; reduce or eliminate stormwater fees and pay for some or all of the changes to
 their properties; in turn, selected ODPs agree to pay for maintaining the system; need to
 explore possible legal issues with this approach

Next SWMAC meeting: 12/10/15

Action Items

- CH2M to send Steve updated stormwater budget spreadsheet (completed on 11/13/15)
- **CH2M** to finalize concept designs for the potential stormwater solutions at the School District-owned parking lot on Runnymede Ave and the Township-owned parking on S. Wayne Ave
- CH2M to investigate actual storm events that the Township has experienced
- CH2M to provide Township with proposal to perform additional hydraulic modeling for Banbury/Francis/Windsor and Runnymede/S. Wayne Ave concepts
- Steve Norcini to follow-up with Gannett Fleming about whether the abandoned pipe at Mill Dam can be filled as a less expensive and feasible alternative to removal/backfill
- **Steve Norcini** to reach out to the Delaware Valley Regional Planning Commission (DVRPC) about the potential for getting a Route 30 project on the Transportation Improvement Program (TIP)