ATTENDEES: SWMAC: Heather Gill, Paige Maz, Charles Boschen, Regina Majercak,

Joe Schanne

CH2M: Daniel Wible

PREPARED BY: CH2M

MEETING DATE: July 9, 2015

SUBJECT: July 2015 meeting

YouTube link: https://www.youtube.com/watch?v=j5e IN7Hee0

Review of Previous Meeting Minutes

June 11, 2015 SWMAC meeting minutes – approved with no comments

Public Comment

No public comment

Presentation by Mark Gutshall of Land Studies

- Mr. Gutshall presented on regional stormwater / flood reduction / pollution removal facilities ("functional natural systems")
- Land Studies has capabilities to design, build, and maintain such regional facilities; their staff
 includes engineers, landscape architects, construction personnel, and other types of "restoration
 practitioners"
- According to Mr. Gutshall, regional scale stormwater strategies may provide a more cost-effective and better performing alternative to smaller scale, distributed stormwater practices such as rain gardens; permitting for such facilities requires involvement by Army Corps and DEP and could take 8-12 months
- Mr. Gutshall presented a case study from Lititz, PA, which entailed a regional facility within the floodplain
- Mr. Gutshall mentioned two potential opportunities in Radnor Township for regional scale facilities:
 Eastern University (existing wetlands/pond) and floodplain area at the southern end of the
 Township (possibly in partnership with Haverford Township)
- Upon request, Land Studies can provide detailed cost estimates for operation and maintenance activities associated with specific stormwater facilities

Stormwater Program Administrator Update by CH2M

- Daniel gave an update on the Ithan Creek Watershed Assessment, including flood analysis results; the flood model was run for the following events: 1-year, 1-hour; 2-year, 1-hour; and 5-, 25-, and 100-year, 24-hour events over the entire Township (Ithan Creek, Meadowbrook Run, Darby Creek, and Gulph Creek) and the results demonstrated good correlation with known flooding locations
- Daniel once again noted that the rapid assessment flood model is based on surface topography and that detailed simulation of drainage conveyance constraints are beyond its capacity; additional tools and data gathering (beyond the Ithan Creek Watershed Assessment scope) will be required to further analyze such constraints
- Flooding risk areas were identified based on model simulation results in conjunction with known flooding areas; modeled flood depth grids were analyzed within streets and parcels (outside of the FEMA 100-year flood zone), considering flooding extent and volume; identified flood areas were

then compared to the known flooding areas from the Darby Cobbs Creek Watershed Act 167 plan and flooding locations provided by the Township

- Based on the model results, CH2M identified the following flood areas as being of highest significance to the Township (in no particular order):
 - Banbury Ave & Francis Ave (behind the Wawa)
 - Lancaster Ave between Bellevue Ave and Wayne Ave
 - Radnor Township Fire Station
 - Midland Ave between Louella Ave and Aberdeen Ave
 - St. Davids Road and Pembroke Ave
 - Brookside Ave between Orchard Way and Iven Ave
 - Near Radnor Township Municipal Building
 - Lancaster Ave near Kenilworth Road and railroad
 - Springmill Road between Lancaster Ave and railroad
 - Wyldhaven Road near Brandymede Road
- Regina indicated that Runnymede Ave floods as predicted by the model; CH2M to consider adding this to the priority list
- Modeling of the benefits associated with all of the various conceptual solutions to be developed is beyond the scope of this effort; however, CH2M will explore modeling the benefits associated with the selected 3 project concepts (to be developed)

Capital Budget/Planning

- Daniel presented an updated summary of the Township Stormwater Budget; 3 new purchase orders were added, totaling \$34,589 (\$10,000 for preliminary evaluation of embankment settling issues at Mill Road; \$12,029 for Barleycone Lane storm sewer repair; and \$12,560 for High View Road storm sewer outfall repair)
- It was generally agreed that the 2016 stormwater budget should take the following into account:
 - Budget for storm sewer televising/cleaning should be increased and should include mapping
 - Budget item for storm infrastructure repairs/upgrades should be included
 - Include cost for SFR rebate program
 - Include planning-level costs for forthcoming Ithan Creek flood reduction concepts and other comprehensive stormwater solutions (including O&M costs)
 - Emergencies should be excluded
 - Budgeted balance should be zero (or close to it)
- There was discussion around how to approach PennDOT regarding potential partnership opportunities; it was generally agreed that PennDOT should not be approached until specific flooding problems are identified on state streets and conceptual solutions (and associated costs) have been developed

Miscellaneous

 SWMAC again expressed interest in adding to the scope of the Wayne Septa station stormwater project; SWMAC would like to have Gannett Fleming provide an update on this design at the August SWMAC meeting

Next SWMAC meeting: 8/13/15

Action Items

- SWMAC (Heather) to contact Stephen Burgo at Tredyffrin Township to discuss Tredyffrin's experiences with working with PennDOT on stormwater projects
- CH2M to provide Powerpoint presentation to SWMAC
- CH2M to update Stormwater Budget as discussed

■ **CH2M** to provide summary of existing Township stormwater infrastructure information (what information do we have? what is lacking?)