



MEETING MINUTES

DATE: Tuesday, November 12, 2019, 7:00 to 8:30 pm

SUBJECT: Chelmsford Stormwater Master Plan Advisory Committee (SWMPAC) – Localized Flooding and Project Prioritization Criteria

LOCATION: Chelmsford, MA, Town Offices – Room 205

ATTENDEES: See Attached List of Community Representatives to the SWMPAC

In Addition:

Christina Papadopoulos, PE, Town Engineer, Town of Chelmsford
Courtney Thompson, Stormwater Engineer, Town of Chelmsford
Jaurice Schwartz, PE, Project Manager, Weston & Sampson

ITEMS OF DISCUSSION

1. Christina Papadopoulos opened the meeting and meeting minutes were approved for the last meeting.
2. Jaurice Schwartz from Weston & Sampson, with assistance from Christina and Courtney, gave a PowerPoint presentation to the SWMPAC (distributed to the group in an email dated 11/6 from the Town) that focused on recent stormwater planning/compliance efforts, localized flooding projects, and project prioritization criteria.
3. As part of the presentation, Christina Papadopoulos provided an update on education and outreach activities conducted since the last meeting. Christina and Courtney will be making stormwater presentations, utilizing the Enviroscape Model, to fifth grade classes at both middle schools in town during early December. Courtney mentioned that the Town now has 300 followers on the DPW Facebook Page, and the Town has received good participation from followers with respect to the Facebook poll questions that have been posted with 25 to 40 participants. Questions posted have been true/false format. There were 5 entries in the Facebook photo contest and some great photos were received. The selected photo will be posted at the new stormwater offices. The Town is in the process of sending out brochures on proper pet waste disposal with dog license renewals. The Town

recently held their Hazardous Waste Collection Day, which was a huge success. A yard waste disposal event will also be held soon.

4. The Town is working on submitting two grant applications under the Municipal Vulnerability Preparedness (MVP) Grant Program, which is administered by the Office of Energy and Environmental Affairs (EEA). Grant applications are due this Thursday. The Town previously underwent the required training and received the necessary certification to become an MVP community making the Town eligible to apply for these grants, which focus on the impacts of climate change on the Town. One grant application consists of the replacement of two existing corrugated metal culverts that have deteriorated within the Dunshire Drive neighborhood, which is in the flood plain. The area is located off Dunstable Road and Deep Brook runs through the neighborhood. The Secretary of EEA, along with town officials and municipal employees, visited the Dunshire Drive neighborhood and spoke with residents first-hand regarding flooding impacts in this area. The Town is requesting funds for design and permitting under the current grant application (Phase I), and will request funds for construction under the next grant round (Phase II). The design will incorporate green infrastructure, e.g. rain gardens and water quality swales, as appropriate. The Town has already begun the survey portion of the project. The second grant application is focused on the development of a stormwater bylaw. Notification of grant award will be in January 2020, with completion of Phase I of the project by June 30, 2020.
5. Courtney continues to screen outfalls during dry weather, although limited progress has been made since the last meeting. There was one high reading of chlorine, which could indicate influence from a potable water source. There are approximately 650 outfalls total to screen. Some testing parameters will vary based on impairments associated with the receiving water. Once dry weather screening of outfalls is complete, illicit discharge detection and elimination (IDDE) investigations will begin. The goal is to eventually add all the data collected to the Town's Drainage GIS. There was concern about discharges from the asphalt plant to receiving waters. Courtney has experience identifying petroleum indicators. There would be a sheen present, and even if the sheen is gone, there will still be growth at the end of the pipe.
6. Jaurice provided an update on the status of field investigation efforts under the Stormwater Master Plan. Weston & Sampson and the Town met with the East Water District last month. They asked us to perform an assessment of the stream near Canal Street adjacent to the UPS Facility. There has historically been some dumping evident in this area. All culverts that could be inspected, where water levels were low enough, have been inspected with the ZoomCAM. All seven localized flooding areas identified by the Town have been field investigated.
7. Jaurice provided an overview of the seven localized flooding areas. One of the members of the committee, Joanne Anderson, mentioned that she lives on Evergreen Street, which is identified as Localized Flooding Area No. 1. She mentioned that she experiences flooding on her property 3 to 4 times per year, and approximately 10 properties are impacted. Flooding extends approximately 6 streets back to the Westland School during severe events. Many residents are not aware that a

drainage pipe actually goes through the backyards of properties in this area. There are no easements recorded on any of the deeds. When Route 3 was previously widened, the outfall draining this area was previously buried, which exacerbated flooding problems in this area, which have since been fixed. The stream located within Localized Flooding Area No. 7 has been filling in over time. There is a need to clean out this stream and re-channelize. The Town is also looking into opportunities to potentially retrofit the existing municipal lot located in this area with green infrastructure. As it pertains to the localized flooding areas, there was some discussion about how the Town does notice areas where dumping is observed. The Town does still allow residents to connect their sump pumps to the Town's drainage system, but backflow preventers must be added. There was also discussion about sending out a survey to residents believed to be impacted by flooding to collect more information from these affected properties.

8. Jaurice presented the criteria being utilized to prioritize culvert improvement, stream maintenance, and localized flooding projects as part of development of the Town's Stormwater Capital Improvement Plan. A standard risk-based approach is being utilized based on the probability of the failure, which is based on the condition of the asset, and the consequence of failure. There was some discussion about how the categories for consequence of failure were weighted, and that public health and safety should be weighted higher than property damage. It was mentioned that projects that are inexpensive to implement should also be given higher priority.
9. The next SWMPAC Meeting is scheduled for December 10, 2019. After the meeting, it was decided that the focus of the next meeting will include a discussion of prioritization criteria as applied to three different projects and a discussion of BMP retrofit opportunities at the Chelmsford High School. The next meeting will be held in the new stormwater conference room at the DPW Offices located at 9 Alpha Road.
10. Meeting Adjourned at 8:30 pm.