Department of Engineering

CITY OF MIDDLEBURG HEIGHTS

15700 Bagley Road • Middleburg Heights, Ohio 44130

Matthew J. Castelli Mayor Michael Mackay City Engineer



MEMO

TO:

Mayor Castelli

Council

CC:

Jim Herron

Richard Halishak

Kim Kerber

FROM:

Michael Mackay

DATE:

September 14, 2020

RE:

2020 FLOODING INVESTIGATION

The following is an update of the City's plan of action in connection with the three recent rainfalls (March 29, May 15 and September 7, 2020) that resulted in flooding in the City.

1.0 INDIVIDUAL HOME DIAGNOSTICS

Mackay Engineering is maintaining a spreadsheet and a file for each homeowner that has reported flooding to the City. Our current spreadsheet has about 147 homeowners who have reported flooding from these past three storms. Each resident that has reported flooding to the City (and for whom we have a telephone number) has been called by Rick Halishak, our resident flooding specialist, and he is meeting with the residents to discuss their flooding issues and make recommendations to the homeowners. There are several residents for whom we do not have correct telephone numbers and we sent letters out requesting telephone numbers and have heard back from some people.

Approximately 59 residents have been visited by Rick Halishak to date. Additionally Rick Halishak has made site visits with City personnel involving issues that affect an additional approximately twelve residents. Each resident will be provided with a flooding investigation report that will detail the advice provided to the homeowner.

2.0 LOCALIZED FLOOD AREAS

Mackay has been working with R2O on the four chronic flooding areas discussed below. R2O is studying these areas utilizing the sanitary sewer modeling that is now available to the City from NEORSD.

The City administration is meeting with R2O to discuss the hydraulic modeling and the conceptual alternatives that R2O has developed for Indian Creek/Gerald Drive,

Newton/Elmdale/Bellmeadow, and Elderdale/Farnum. We will also be discussing with the City administration the conceptual cost estimates for the proposed alternatives.

The Old Pleasant Valley/Shawnee area will be studied as part of the design of Big Creek Parkway Basin No. 2. We feel the installation of this detention basin should benefit this area and the design of this basin will help us to determine the extent of the benefit. Additionally, the rear yard sewer was recently cleaned by the County and the City is continuing to work with the two houses at the north end of Shawnee to install emergency overflow swales.

3.0 BIG CREEK PARKWAY DETENTION BASINS

The City is in the process of talking with the landowners about land acquisition in the areas where the detention basins are currently planned.

4.0 ADDITIONAL FLOODING AREAS

The following areas of general surface flooding have also been investigated by Mackay and the City.

4.1 Revere Circle

The City provided the residents with permission from CEI to install swales to protect their homes from the water drainage off the CEI property.

4.2 Ragall Parkway

The City presented to several residents on Ragall Parkway a similar solution (i.e. rear yard swales) to water drainage off the CEI property.

4.3 Craigmere

- a) The City is investigating whether it is feasible to add another outlet from the Craigmere area to the existing ditch near the railroad tracks.
- b) The City will also investigate whether to reinstall a catch basin that was removed nearly 20 years ago.

4.4 Grant

The City will continue to monitor and clean the flow restrictors that were installed on the catch basins in this area. The City will also request the County to film and clean any sewers in this area that are not functioning properly.

4.5 Fry Road

Two areas need swales/ditches installed or cleaned in order to provide better yard drainage. The City will need to obtain permission from the landowners prior to any work.

4.6 Bagley Road

The City will have the County film and clean pipes that are draining rear

yards and which do not appear to be functioning properly since the Bagley Road widening.

4.7 Pine Valley Apartments
The City has granted permission to the apartment owners to extend the earthen berm along Baldwin Creek.

Michael Mackay

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