

**VILLAGE OF NORTHFIELD  
ENGINEER'S REPORT – RICHARD S. WASOSKY, P.E., P.S.**

**September 9, 2020**

*Subject:* Ledge Road and S.r.8 Traffic Signal Pole Replacement  
*Comment:* Signal Service has not called me to tell me the date of the installation of the pole. I still expect it to be this month.

*Subject:* Severe Rainfall Events in 2020 in Northfield  
*Comment:* So far in 2020 there have been 5 greater than normal rainfall events in Northfield. The 3 hour rainfall totals on August 8, 2020 and September 7, 2020, as measured at the NEORSO Oakwood Rain Gauge were 2.63 inches and 2.64 inches which are each equivalent to a 25 year storm frequency. The 1 hour rainfalls on July 7, 2020 and July 27, 2020 were 1.63 inches and 2.01 inches. These rainfalls were equivalent to a 7 year frequency and a 20 year frequency. The 6 year rainfall of 2.10 inches on May 15, 2020 was equivalent to a 4 year rainfall  
The storm sewer system outletting from the Plaza Shopping Center through the area between Russo's Pizza and the Redi Wash building can not handle these flows. In addition, the overland sheet flow coming from the Plaza Shopping Center must be intercepted into a storm catch basin or trench drain before entering S.R. 8 in order to reduce surface flooding of S. R. 8. I have discussed this matter with Jason Walters, and he is investigating the price of installing a 12 inch wide trench drain across the Plaza Shopping Center Exit Driveway. I also recommend placing an ODOT Standard No. 3 Catch Basin just north of the Plaza Shopping Center Driveway

*Subject:* Traffic Signals Malfunctions at S.R. 8 and Meadowlane and S.R.8 and Fire Station Driveway  
*Comment:* On August 19 and 20, 2020 I did field investigations of the problems with the traffic signals at Meadowlane and S.R.8 and at the Fire Station Driveway and S.R.8 based upon complaints I received from the Police Chief and workers at the Industrial Park along Meadowlane.  
The Meadowlane problem is a loop detector that has to be replaced. The traffic signal currently works and meets all ODOT requirements; however, the system is operating on a fixed time cycle which is not very efficient. Replacing the loop detector will cause the signal to operate far more efficiently. Because of our budget problems we are not replacing the loop detector at this time.  
The signal at the Fire Station was recycling through both phases of the signal cycle even though there were no vehicle calls for the Fire Station Drive. The signal preemption unit was detecting no existing vehicle calls on the Fire Station Drive. This can occur sometimes due to sun glare, shadows, fog or heavy rain or snow.

Deleted: .

