



Kalamazoo County Drain Commissioner Eagle Lake Drain Inspection Report

Date: July 25, 2019

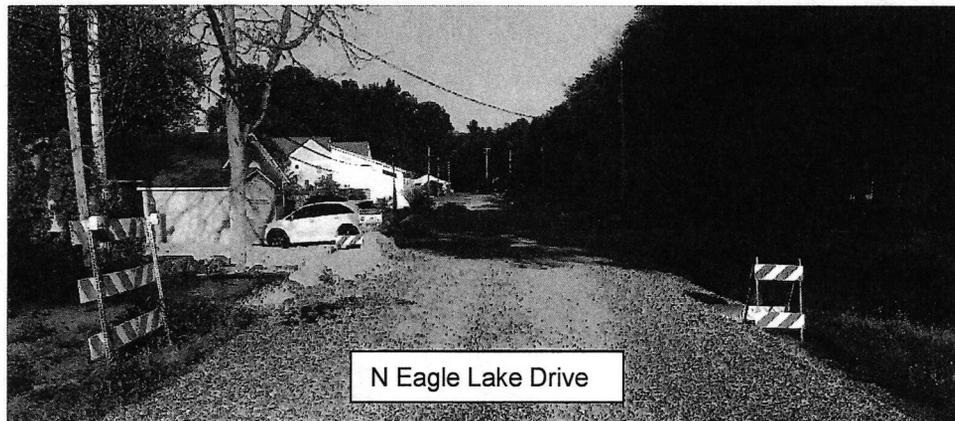
By: Kyle Visker, P.E. – Land & Resource Engineering (LRE)

Re: Eagle Lake Drain, Texas Township, Kalamazoo County

LRE performed an inspection with the Kalamazoo County Drain Commissioner's Office (KCDC) of the Eagle Lake Drain (Drain) and Drainage District on July 23, 2019 in response to flooding on N Eagle Lake Drive and claims of altered drainage conditions north of W OP Avenue.

Field Investigation: The Drain was inspected from the outlet at Eagle Lake to the large ponds on Deloof's property (Figure 1). Flooding on both sides of N Eagle Lake Drive was observed due to the high water elevation of Eagle Lake. The Road Commission of Kalamazoo County (RCKC) has added a few feet of gravel over the road and installed a temporary culvert at the east end of the road. The culvert is set at an elevation just above the water level of Eagle Lake.

The Deloof property was inspected for signs of altered drainage. The existing ponds have a small (8-inch to 10-inch) outlet pipe that flows south to a low wet area,



crosses through a 24-inch culvert into another small wet area, then flows through a shallow channel to W OP Avenue. We found no evidence that the existing drainage pattern had been modified or altered. The ponds and wet areas on the site combined with the culverts have created a stormwater treatment train or series of detention basins. This is ideal for attenuating peak flows downstream.

Recommendation: We recommend regrading the roadside ditch along N Eagle Lake Drive and adding a culvert / outlet to Eagle Lake after the water surface elevation of Eagle Lake goes down. The watercourse upstream of W OP Avenue is functioning properly with no signs of altered drainage; therefore, we do not recommend extending the drain onto the Deloof property.

Figure 1 – Drainage Map

