

December 8, 2014

Mercantile Bank of Michigan 310 Leonard St NW Grand Rapids, MI 48504

Re: Wetland Determination Report - Holt Rd & College Rd Site

Pursuant to your request, Marx Wetlands LLC conducted a wetland delineation for the above-referenced site. The intent of this determination is to provide a report of the character of wetland areas within the subject parcel and an opinion as to the possible jurisdiction of the Michigan Department of Environmental Quality (MDEQ) over wetland areas identified on-site.

The wetland delineation was performed in accordance with the Northcentral-Northeast Interim Regional Supplement to the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual. The delineation of any wetland depends on three basic parameters. These parameters are: 1) the presence of hydrophytic vegetation (plants adapted to living in saturated soils), 2) hydric soils (distinctive soil types that develop under saturated conditions), and 3) wetland hydrology (the presence of water at or near the surface for a specific period of time). The above parameters are virtually always interrelated and present in wetland systems. The wetland field delineation was performed on May 2, 2014. A review of the findings is presented below.

The Assessment Area consists of approximately 2.75 acres of vacant land located along the west side of College Road, on the northwest corner of its intersection with Holt Road, in Delhi Township, Ingham County, Michigan. The Assessment Area is a rectangular site bounded on the east by College Road, and on the south by Holt Road. The site includes wooded and shrub areas with an emergent wetland area at the west end. The topography of the site is gently rolling.

Information gathered from site reconnaissance indicates that one wetland area appears to be located on the site. This feature is identified on the Certified Boundary Survey Map included as an attachment.

Wetland Area A is located on the west boundary of the property near Holt Road, and extends off the property to the east and north. This

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wetland area was observed to have primarily emergent characteristics with some shrub areas (Figures 1 and 2). The dominant wetland flora consisted of broadleaf cattail (*Typha latifolia*), reed canary grass (*Phalaris arundinaceae*), blue flag iris (*Iris versicolor*), skunk cabbage (*Symplocarpus foetidus*), red raspberry (*Rubus strigosus*), green ash (*Fraxinus pennsylvanica*), silky dogwood (*Cornus amomum*), elderberry (*Sambucus canadensis*), sandbar willow (*Salix exigua*), marsh marigold (*Caltha palustris*), and fowl manna grass (*Glyceria striata*). These species range in wetland indicator status from FACW to OBL, which indicates that they typically occur in wetlands. This area appeared to receive its hydrology from precipitation, seasonal snow melt and runoff from adjacent upland areas. At the time of the delineation, the hydrology was observed to include standing water present in much of the wetland area.

Marx Wetlands LLC has determined that the wetland area (A) appears to meet the requirements of Part 303, Wetlands Protection, of the NREPA, and appears to fall under the jurisdiction of the MDEO.

Part 303, MDEQ Wetlands Protection, states that if a wetland is five acres or larger and/or connected to or located within 500-feet of a river, stream, watercourse, lake or pond, it would be regulated. Wetlands A is connected to the Sycamore Creek, which is a stream by definition, by a culvert under College Road. Consequently, this wetland area was determined to be less than five-acres in size but appears to be contiguous with a regulating water body and should therefore, be considered regulated by the MDEQ.

A permit is required by the MDEQ for any proposed work (e.g., filling, dredging, construction, and draining and/or other development) that takes place within the boundaries of a regulated wetland. Most construction activities that take place outside of these boundaries do not require a permit from the MDEQ.

Please be advised the information provided in this report is a professional opinion. The ultimate decision on wetland boundary locations and jurisdiction thereof rests with the MDEQ and, in some cases, the Federal government. Therefore, there may be adjustments to boundaries based upon review of a regulatory agency. An agency determination can vary, depending on various factors including, but not limited to, experience of the agency representative making the determination and the season of the year. In addition, the physical characteristics of the site can change with time, depending on the weather, vegetation patterns, drainage, activities on adjacent parcels,



or other events. Any of these factors can change the nature / extent of wetlands on the site.

Thank you for the opportunity to provide this wetland determination. If you have any questions, please contact me at your convenience.

Sincerely,

Marx Wetlands LLC Gary F. Marx

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Attachment





Figure 1. Emergent wetland on west side of site viewing north.



Figure 2. Scrub shrub vegetation in Wetland A.



