



VAN BUREN COUNTY DRAIN COMMISSIONER

JOE PARMAN, Drain Commissioner GEORGIA MASSURA, Deputy Drain Commissioner PETER VANDOP, PE, PS, Engineer, Chief Deputy ANDY ABBOTT, SESC & Drain Maint.

ENGINEER'S REPORT

LAMBERT DRAIN PETITION

December 9th, 2015

GIVEN: The South Haven Charter Township Board, on the 9th of December, unanimously voted to petition the Van Buren County Drain Commissioner for the cleaning out, relocating, widening, deepening, straightening, tilling, extending, consolidating, relocating along a highways or requires structures or mechanical devices that will properly purify or improve the flow on the drain or pumping equipment necessary to assist or relieve the flow of the drain, or needs supplementing by the construction on one or more relief drains which may consist of new drains or extensions, enlargements, or connections to existing drains, or needs 1 or more branches added thereto as may be required for the maintenance and improvements of the drain known and designated as the **Lambert Drain**, Located and established in the Charter Township of South Haven.

Petitioner's further show that the said drain needs extending and branches added to better alleviate the flooding and facilitate storm water flow into the Lambert County Drain, and to further determine whether the addition and/or deletion of lands as recommended by a licensed engineer or surveyor will more accurately define the boundaries of the land benefited by the Drain, and whether such additions and/or deletion of lands is just and equitable pursuant to Section 197 of act No. 40, P.A. 1956, as amended; and such drain is necessary and conducive to the public health, convenience and welfare of South Haven Charter Township (Michigan Drain Code, MCL 280.191, P.A. 40 of 1956 as amended, chapter 8).

The area prone to flooding is PP# 80-17-015-037-00 owned by the Jakub's Edwin Trust and those commercial properties to the north including Locker and Locker Properties, Lakeside entertainment and the South Haven Township Hall. Civil litigation has been documented between the Jakub's property and Locker and Locker Properties.

SURVEY AND SITE REVIEW: Preliminary Survey work was completed pursuant to quantifying the rate of runoff from said parcels and calculating the flow capacity of the existing ditch and enclosed storm sewer pipe along M-140.

The calculated release rate of the 18 acres north of the Jakub's Edwin Trust parcel is 28 cubic feet per second (cfs). Culvert analysis for flow rate of the 15" pipe under the Jakub's Parcel Driveway is 9.5 cfs. The diameter of the driveway culverts and pipe enclosure to the south is all 15". The 15" pipe is undersized and backing up the surface runoff within the road side ditch and adjacent lands north of Jakub's Driveway enclosure.

South Haven Township Hall parcel as well as the Lakeside Entertainment parcel both where constructed with good drainage gradient away from their respective structures. The water is conveyed southeasterly towards M-140.



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The two Locker & Locker parcels, south of Lakeside Entertainment, are both relatively flat. The undeveloped parcel just south of Lakeside Entertainment receives a significant amount of surface runoff from the parking lot of Lakeside Entertainment.

This parcel is grass covered with brush and trees on its westerly side. The soil type for this parcel is Belleville Loamy Sand. The Hydrolic Soil Group for this classification is C/D. What this translates to is that there is a very low infiltration rate. The soils are poorly drained.

SUMMARY: 8 acres of impervious area. Poorly drained soils. Not a sufficient outlet for surface runoff. There is a storm water management issue for lands west of M-140 and south of the South Haven Township Hall. In addition, while surveying, a local resident located on a private drive east of M-140 and just south of the current Lambert Drainage District, spoke to me of existing drainage issues within this area that is serviced by an existing drainage swale and a enclosed storm sewer pipe.

Respectfully Submitted,

Peter Van Dop, P.E., P.S.; Chief Deputy



BLUE STAR MEMORIAL HWY

M140 HWY

10TH AVE

LAMBERT DR

M140 HWY

80-17-015-102-10

80-17-015-101-04

80-17-015-103-20

80-17-015-047-00

80-17-015-024-01

80-17-015-057-00

80-17-015-102-20

80-17-015-091-00

Lakeside Entertainment

80-17-015-095-01

80-17-015-089-00

80-17-015-095-10

80-17-015-088-01

80-17-015-094-00

80-17-015-033-01

80-17-015-092-01

80-17-015-093-00

80-17-015-032-00

80-17-380-002-00

80-17-015-037-00

Jakub's Edwin Trust

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