



## Staff Report

**Report Title: Victoria Road Flooding**

**Prepared By: John Yungblut, C.E.T., Director of Public Works**

**Department: Public Works**

**Date: Jun. 7, 2021**

**Report Number: PW-2021-06-39**

**File Number: T06 VIC 21**

**Attachments: Photo 1, Photo 2, Photo 3, Photo 4, Photo 5, Site Plan**

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### **Recommendation:**

THAT the Township of Huron-Kinloss Committee of the Whole receives for information, Report Number PW-2021-06-39, as prepared by John Yungblut, Director of Public Works.

### **Background:**

The purpose of this report is to inform Township Council and residents about a situation that occurred on Victoria Road in March 2021. This report will only describe observations made by Township staff and will not include any speculation or accusations.

On March 17, 2021, Public Works observed flooding on Victoria Road in the geographic area of Point Clark (see attached Photo 1 and Photo 2). The cause of the flooding appeared to be a blocked culvert located near the public beach access at 795A Victoria Road. Not only did this incident cause significant flooding on the road, but Township staff also received reports of significant damage to private properties in this area (see attached Photo 3 and Photo 4).

During the initial investigation of the culvert blockage, Township staff determined that the outlet for this culvert was a drainage system west of Victoria Road which is located on private property that extends from #795A to Clark Creek and has been in place for a considerable length of time. The drainage system consists of a combination of open swales and sections that have been enclosed with culverts over time. The longest enclosed section is from the road culvert at #795A southerly to #785, which appeared to be blocked in some way.

After monitoring the situation for a brief period, Township staff determined that the surface water was not receding into the sandy subsoil as expected, so on March 25<sup>th</sup>, a contractor was hired to pump the surface water to the lake through the public beach access #795A. Multiple pumps were in operation continuously until April 28<sup>th</sup> when the existing culvert had been drained entirely. The majority of the surface flows appeared to originate from the woodlands to the east of Victoria Road.

On May 17<sup>th</sup>, Township staff enlisted the services of a sewer inspection contractor to inspect the existing drainage system on the west side of Victoria Road to try to determine the source of the blockage. The contractor was able to inspect the enclosed system starting at #787 and discovered that the existing pipe was blocked by a septic tank chamber located at #789 (see attached Photo 5) that was installed in September 2020.

### **Discussion:**

Township staff considered several options to address the drainage issue in this area with some landowners in this area and the Saugeen Valley Conservation Authority (SVCA):

Option 1: Do nothing and request that landowners make the necessary repairs.

Option 2: Repair the existing blocked drain so the drainage system on the west side of Victoria Road could continue to function.

Option 3: Construct a new outlet from Victoria Road through beach access #795A that will discharge the surface flows to the lake.

Option 4: Construct an open ditch along the east side of Victoria Road from #796 to Clark Creek within a parcel of land that was previously transferred to the Township (see attached Site Plan).

Option 1 was not selected for the following reasons:

- The flooding damage inflicted to the road and private properties is highly likely to reoccur next spring without corrective action.
- The Township does not have the authority to require landowners make repairs to the drainage system without an agreement in place, so there is no assurance that the work will be completed in a timely and satisfactory manner.

Option 2 was deemed to be an undesirable solution for the following reasons:

- The Township does not have an easement agreement with any of the nine (9) properties that the existing drainage system is located. Without an easement, the future maintenance of the system will be very difficult.

- More issues were identified with the system than just the septic tank installation such as improper pipe slope at #787 and a separated pipe joint near the roadway at #795A. Although these deficiencies did not appear to cause these flooding issues, they would have to be addressed for this system to function long term.

Option 3 was not selected for the following reasons:

- This is the most expensive option with an estimated construction cost of \$25,000 due to the confined work area and the depth required through the beach access.
- Outlets at the lake are a maintenance issue with fluctuating lake levels and wind action that cause blockages.
- Although a new outlet to the lake would have been approved by SVCA, they preferred an alternative solution if at all possible.

Option 4 was chosen because the open ditch is estimated to cost less than \$5,000 to construct and it will be considerably less expensive to maintain in the future. The new ditch is also offset from the roadway which will reduce any safety issues for road users.

**Financial Impacts:**

In addition to the estimated ditch construction cost of \$5,000, the cost of fuel, machine time and labour to pump the surface water from the roadway to the lake from March 25<sup>th</sup> until April 28<sup>th</sup> was \$3,758.49 plus HST. The cost to flush and inspect the existing drainage system was \$2,430 plus HST. All costs associated with the work will be funded by the 2021 Operating Budget.

**Strategic Alignment / Link:**

We are an environmentally conscious community that are good stewards of our natural environment by being aware and taking responsibility.

**Respectfully Submitted By:**

John Yungblut, Director of Public Works

**Approved By:**

Mary Rose Walden, Chief Administrative Officer





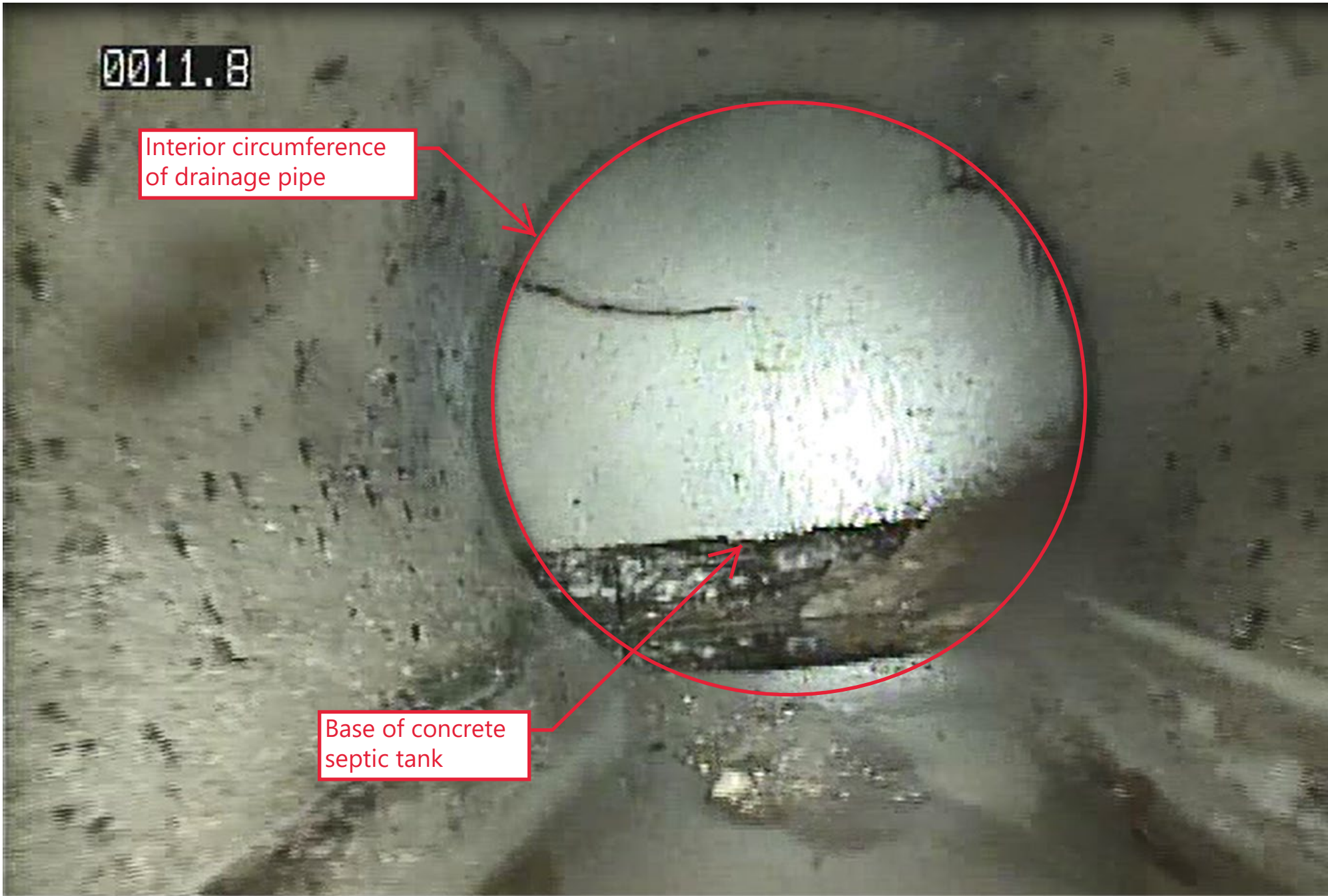




0011.8

Interior circumference  
of drainage pipe

Base of concrete  
septic tank







Lake Huron

EXISTING DRAINAGE SYSTEM

APPROXIMATE SEPTIC TANK LOCATION

EXISTING OUTLET AT CLARK CREEK

7777

779

781

783

785

787

789

791

793

795

797

799A

799B

Victoria Rd

LOCATION OF SPRING FLOODING

LIMIT OF MUNICIPAL ROAD ALLOWANCE

LIMIT OF MUNICIPAL PROPERTY

PROPOSED OPEN DITCH

