



PEARSON

ENGINEERING LTD.

November 23, 2020

File: 20050

Attention: James Hunter, BURPI
Senior Planner

647 Welham Road, Unit 9A,
Barrie, ON, L4N B7

Email only: jhunter@ipsconsulting.com

Dear James,

**Re: 640 Mapleview Drive, Innisfil
Septic Bed Suitability Brief**

Pearson Engineering has reviewed the subject lands at 640 Mapleview Drive, Innisfil, as outlined in the proposed severance sketch issued by Innovative Planning Solutions as to the suitability of the lot supporting a proposed septic bed.

The site is located in a wooded area on the north side of Mapleview drive approximately 1km west of Lake Simcoe. There are existing lots to the south and east which are currently serviced by septic beds. These lots are equivalent in size or smaller supporting the feasibility of the site supporting a proposed septic bed. A review of the lands through aerial survey and Simcoe County mapping show no creeks, waterways, vulnerable aquifers, or wetlands on the subject property or within any required septic bed setbacks.

Furthermore, calculations were completed to provide an approximate bed size based on a worse case soil scenario (T-time=50) and for a large 3000L/day 4-bedroom home. (at 300sq.m)

Calculations are as follows:

Area = $QT/850$

Mantle Area = Max loading rate of 4L/sq.m

Therefore: $3000L/day \times 50 / 850 = 177 \text{ sq.m}$ Distribution bed area
 $3000L/day / 4 = 750 \text{ sq.m}$ Mantle area

As shown above, a maximum bed area of 750 sq. could be required. This required area could be reduced with the addition of a tertiary treatment system.

With the lot size of 3,040 sq.m and evaluating the site characteristics, the subject property is sufficiently sized to support a suitable septic bed even under poor soil conditions and with a larger 4-bedroom home.



If you have any questions regarding the enclosed, or require any additional information, please feel free to give me a call at (705) 719-4785, ext. 222.

Regards,

PEARSON ENGINEERING LTD.

Gary Pearson, P.Eng.
Principal

