Town of Grimsby Building Division
160 Livingston Ave, Grimsby, ON
L3M 4G3 Tel 905-945-9634
www.grimsby.ca

Information for Septic Permit

Date: _____

Owner(s):_____ Property

Address:_____

○ New Construction ○ Repair/Alteration ○ Other:_____

1. Lot Dimensions:_____ Lot Area: _____
2. Use of Building: *Existing*:_____ After Construction:_____
3. Total No. of Dwelling Units in Building: Existing:_____ After Construction: _____
4. Finished Floor Area of Building: Existing:_____ After Construction: _____
5. Number of Bedrooms: Existing:_____ After Construction: _____
6. Fixture Units: Existing:_____ After Construction: _____ 7. Indicate Water Supply: ○ Dug Well ○ Drilled Well-Well I.D#:_____

   ○ Cistern ○ Communal
8. Indicate number of plumbing fixture units within building served by sewage system:_____
9. Total daily design sanitary sewage flow_____litres/day
10. <u>Site Evaluation</u>

Prepared by:_____ Ph:_____ Email:_____

Address:_____

Signature:_____

Depth to Bedrock/Hardpan:_____ Depth to Zone of Soil Saturation:_____

Description of Native Soil:_____ Soil Permeability Test: _____

11. Description of sewage system:_____
12. Description for Means of Detection:_____
13. Description of Treatment Unit(s):_____
14. Description of Effluent Filter – Manufacturer and Model:_____
15. Description of Pump:_____

Head:_____ Run:_____ HP:_____

***Signed maintenance agreement with homeowner and manufacturer attached if Tertiary System.**

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Sewage System Calculations

TEST HOLES SHALL BE FIVE FEET DEEP, TO BEDROCK TABLE OR TO WASTEWATER TABLE

TEST HOLE – Subsurface conditions encountered	Rock & G.W.T.	Depth (m)	Soil Type	"T" Time
		-0-		
		-0.25-		
		-0.50-		
		-0.75-		
		-1.00-		
		-1.25-		
		-1.50-		

Q	=	Total Daily Sewage Flow in Litres
L	=	Length of Distribution Pipe in Metres
T	=	Percolation Time of Soil

SEPTIC TANK SIZE = Working Capacity of Septic Tank				
Size	=	Q X 2		
	=	___ X 2	=	Litres
Non-Residential	=	___ X 3	=	Litres
Note: In **NO** case shall the working capacity of the septic tank be less than 3,600 litres.				

Use of Existing Tank:	New C.S.A Standards	Treatment Unit Other than Septic Tank:	Working Capacity:
○ Yes ○ No	○ Yes ○ No	○ Yes ○ No	_____Litres
Pump Required: ○ Yes ○ No	Comments:		

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ABSORPTION TRENCHES = Length of Distribution Pipe (for systems with septic tank)			
L	=	$\frac{Q \times T}{200}$ OR $\frac{Q \times T}{300}$	(If receiving effluent from a Level ll,lll or IV treatment unit)
	=		
Note: The total length of distribution pipe shall not be less than 40 metres Fill Material Loading Rate Area requirements (unsaturated suitable soil in area of bed and mantle)			
$\frac{Q}{\text{As per loading rate in Table 8.7.3.1.}}$	=	_____	= _____

FILTER BED = Size of Filter Medium Required			
If Q is 3,000 litres or less =	Q ÷ 75 ÷	=	_____Sq. Meters
If Q is more than 3,000 litres =	Q ÷ 50 ÷	=	_____Sq. Meters
If TERITARY system is used =	Q ÷ 100 ÷	=	_____Sq. Meters
Base of Filter Medium – shall extend to a thickness of 250mm over the following area:			
AREA	=	$\frac{Q \times T}{850}$	
		$\frac{X}{850}$ =	_____Sq. Meters
Note: "T" is the Percolation Time of the underlying Native Soil Fill Material Loading Rate Area requirements (unsaturated suitable soil in area of bed and mantle)			
$\frac{Q}{\text{As per loading rate in Table 8.7.4.1}}$	=	_____	= _____Sq. Meters

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TERTIARY DESIGN - Type A Dispersal Bed Proof of approved filter material must be provided prior to final inspection.					
If Q is 3,000 litres or less	L	Q ÷ 75	=		
If Q is 3,000 litres or more	L	Q ÷ 50	=		
Sand Area: Underlying Soil Percolation Time <15min: $\frac{Q \times T}{850}$ $\frac{X}{850}$ =			OR	Sand Area: Underlying Soil Percolation Time >15mins: $\frac{Q \times T}{400}$ $\frac{X}{400}$ =	
(May use lesser of stone area or above formula)				(May use lesser of stone area or above formula)	

TERTIARY DESIGN - Type B Dispersal Bed				
Soil with Percolation Time T > 24min/cm	L	Q ÷ 40	=	
Soil with Percolation Time T < 24min/cm	L	Q ÷ 50	=	
Sand Area: Minimum Area calculated by using Table 2-8 of the BCMOH, "Sewerage System Standard Practice Manual" OR	A	$\frac{Q \times T}{400}$	=	

SHALLOW BURIED TRENCHES – Length of Distribution (L)						
In soil < 1 - < 20 minutes	L=	$\frac{Q}{75}$	=	_____	=	_____Metres
In soil 20 – 50 minutes	L=	$\frac{Q}{50}$	=	_____	=	_____Metres
In soil 50 - 125 minutes	L=	$\frac{Q}{30}$	=	_____	=	_____Metres
(Total Length of pipe shall not be less than 30 metres and "T" time of soil "T" time NOT to exceed 125 minutes)						

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Minimum Clearance Distance Measurements

Clearance Distances for Treatments		
Object	**Minimum Clearance (m)**	**Actual Distance**
Structure	1.5	
Well	15	
Lake	15	
Pond	15	
Reservoir	15	
River	15	
Spring	15	
Stream	15	
Property Line	3	

1. Include all applicable structures including neighbouring structures if required.
2. Include all applicable wells including neighbouring wells if required.

Clearance Distances for Distribution Piping		
Object	**Minimum Clearance (m)**	**Actual Distance**
Structure	5	
Well with a watertight casing to a depth of at least 6 m	15	
Any other well	30	
Lake	15	
Pond	15	
Reservoir	15	
River	15	
Spring not used as a source of potable water	15	
Stream	15	
Property Line	3	

1. Include all applicable structures including neighbouring structures if required.
2. Include all applicable wells including neighbouring wells if required.

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Sewage System Design – Site Plan

Owner(s): _____

Property Address: _____

(street) (city/town) (postal code)

Designer: _____

Outline property with all dimensions – include setbacks from existing/proposed dwelling and bed area, property line, all structures, wells and cisterns (including neighbours), water courses/wetland areas.

Include all details of sewage system (dimensions of bed/mantle, tank location(s), pump chamber).

Include cross-section design for raised systems – indicate existing grade, depth of material.

Indicate existing or proposed driveways, easements, right-of-ways, drainage patterns.

Measurements must be in metric and to scale.

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Three Stages of Inspections Required:

1) Prior to construction, grading and scarifying before addition of fill.
2) Inspection of fill prior to backfilling (proof of approved fill material to be submitted).
3) Final grading – filter bed systems require topsoil on top and sides and bed to be sodded/seeded prior to issuance of Use Permit.

ANY CHANGES TO APPROVED DESIGNS MUST BE REVIEWED AND APPROVED BY THE TOWNSHIP OF WAINFLEET PRIVATE SEWAGE SYSTEM REGULATING DEPARTMENT PRIOR TO CONSTRUCTION.