

# BUILDING PERMIT APPLICATION – ONSITE SEWAGE SYSTEM

## SCHEDULE 3A – SOIL & WATER TABLE INFORMATION

(Minimum depth of test pit: 1 metre)

DATE : \_\_\_\_\_ TEST PIT - Sub-surface conditions encountered

		APPLICANT'S USE		INSPECTOR'S USE	
Existing grade	Depth (m)	Soil Type	"T" Time	Soil Type	"T" Time
Rock & G.W.T.	- 0 -				
	- 0.25 -				
	- 0.50 -				
	- 0.75 -				
	- 1.00 -				
	- 1.25 -				
	- 1.50 -				

**LEGEND: (Elevations based on existing grade) (Note: proposed revised grades must be noted on site plan and cross-section)**

BR – bedrock or impervious soil (min. 0.9 metres to bottom of stone)	m – metres
GWT- ground water table	EG – existing grade Note proposed grade (PG) if applicable
HGWT – high ground water table (min. 0.9 metres to bottom of stone)	"T" – percolation rate (min/cm)

**SEWAGE SYSTEM DESIGN CRITERIA (Based on above details):**

<b>Sewage System minimum raised height above grade</b>	1.5m -- GWT or bedrock depth = Minimum raised height of bed
	1.5m -- _____ = _____ (raised height of system)

**WATER SUPPLY (PROPOSED OR EXISTING):**

Municipal		Dug Well		Drilled Well		Shallow or Sand Pt.		Other		Specify:
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**INSPECTORS REPORT:**

Date of Inspection: _____ <div style="text-align: center;">day/month/year</div>	<b>LEACHING BED DESIGN CRITERIA</b> Depth to rock/impervious soil 1.5 - _____ (Bedrock/Clay) = _____ metres
a.m. p.m.	Design HGWT 1.5M – _____ (HGWT encountered) = _____ metres
Weather	Site to be scarified                      yes                      no
Representing Owner:	Sub-grade inspection                      yes                      no
Design "T" _____ min/cm	Mantle                      yes                      no
Percolation test required      yes                      no	Inspected and Recommended by:
Grain size analysis required    yes                      no (if yes, see addendum)	

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## SCHEDULE 3B- DESIGN CRITERIA

### PLUMBING SPECIFICATIONS – FOR ALL BUILDINGS TO BE SERVICED BY THE PROPOSED SEWAGE SYSTEM

DESCRIPTION	#UNIT PER FIXTURE	DWELLING #1		SLEEPING CABIN (BUNKIE)		OTHER (Specify)		OTHER (Specify)	
		EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED
Toilet	4								
Wash Basin (Sink)	1								
Bathtub or Shower	1.5								
Shower Stall	1.5								
Bathroom Group (3 Piece)	6								
Kitchen Sink (Single or Double)	1.5								
Bar Sink	1								
Washing Machine	1.5								
Other (specify)									
Garbage Grinder Y / N * See Note									
<b>TOTAL FIXTURE UNITS</b>									
<b>FINISHED FLOOR AREA</b>									
<b># OF BEDROOMS</b> 2 persons/bdrm									
<b># OF ADDITIONAL PEOPLE PROPOSED **</b>									

\* NOTE: GARBAGE GRINDER – 2.5 x DAILY FLOW FOR SEPTIC TANK SIZING\*  
 \*\* Identify # of persons more than 2 persons/bedroom proposed. An additional flow rate of 250 L/day will be assigned to each additional person\*\*

	<b>TOTALS</b>		<b>Calculated Flow Rate (see Design Flow Chart Appendix A)</b>	
<b># Bedrooms</b>	_____	→	_____ L/day	(see associated flow rate in Appendix A)
<b># Fixture Units (FU)</b>	_____	→	_____ L/day	(50L/FU >20 FU see Appendix A)
<b>Floor Area</b>	_____	→	_____ L/day	(100 L./10 m <sup>2</sup> >200 m <sup>2</sup> see Appendix A)

**Total Daily Sewage Flow Q = \_\_\_\_\_ L/day**  
 [bedroom flow rate (up to 2,500L/day) + highest calculated rate] (Flow to be used for design Schedule 3C)

### PROPOSAL TO CONSTRUCT SEWAGE SYSTEM

**Class 2 Leaching Pit** -- see handout (200 L./fixture unit (pressurized) cannot exceed 1,000 L./day)  
 Side wall Loading rate (litres/day /sq.m.) = 400/T Lr = 400/\_\_\_\_\_ = \_\_\_\_\_sq. m. of sidewall  
 Design details: \_\_\_\_\_

**Class 4 Sewage System** - septic tank and or leaching bed (filter or trench bed see Schedule 4C (next page)

**Tertiary Treatment Unit** – BMEC approval & Literature (specs for unit) must be submitted with application  
 Make/model \_\_\_\_\_ Flow Rate \_\_\_\_\_ L./day Alarm \_\_\_\_\_ ( mech. systems)  
 Raised Height \_\_\_\_\_ metres. Stone Area \_\_\_\_\_ m<sup>2</sup> Sand Area \_\_\_\_\_ m<sup>2</sup>

**Class 5 Holding Tank** – Requirements: Audio/Visual Alarm & 3” venting  
 Q = \_\_\_\_\_ x 7 = \_\_\_\_\_ L Tank Size Proposed \_\_\_\_\_ L

**Pump Out Contract (sewage haulage agreement)** \_\_\_\_\_ (approval and contract required prior to submission)

**BUILDING PERMIT APPLICATION – ONSITE SEWAGE SYSTEM  
SCHEDULE 3C – PROPOSAL TO CONSTRUCT CLASS 4 SEWAGE SYSTEM**

**Septic Tank Use Existing**  **New CSA Standard**  **(Q x 3 if non-residential use)**

Residential Occupancy **Q** \_\_\_\_\_ X 2 = \_\_\_\_\_ litres  
Residential with Garburator **Q** \_\_\_\_\_ X 2.5 = \_\_\_\_\_ litres

**Proposed Working Capacity** \_\_\_\_\_ litres (min. 3600L)

**Treatment Unit (specify)** \_\_\_\_\_ **Operating Capacity** \_\_\_\_\_ litres/day

**Class 4F Filter Bed**

If Q is 3000 litres or less  $Q = \text{_____} \div 75 = \text{_____}$  Sq. Metres  
If Q is more than 3000 litres  $Q = \text{_____} \div 50 = \text{_____}$  Sq. M.  $\div 2$  beds of \_\_\_\_\_ Sq. M.  
If Treatment Unit  $Q = \text{_____} \div 100 = \text{_____}$  Sq. Metres  
Extended Contact Area (Base of Filter)  $\frac{Q \times T}{850} = \frac{\text{_____} \times \text{_____}}{850} = \text{_____}$  Sq. Metre Contact

**PROPOSAL: # of Beds** \_\_\_\_\_ **Filter Bed Area** \_\_\_\_\_ m<sup>2</sup> **Contact Area** \_\_\_\_\_ m<sup>2</sup> **Raised height** \_\_\_\_\_ m.

**Class 4 Trench Bed Absorption trench( \*  $\div 300$  if treatment unit )**

T-time (percolation rate of soil used for calculation.) Native Imported Raised height \_\_\_\_\_ m.  
 $Q \times T \div 200^* = \text{_____} \times \text{_____} \div 200^* = \text{_____}$  m.  $\div$  no. of runs \_\_\_\_\_ = \_\_\_\_\_ m. per run

**Class 4 Loading Rates - Area requirements** **LOADING AREA – EXISTING** \_\_\_\_\_ **PROPOSED** \_\_\_\_\_  
(Native T<15) (Imported T>15)

**Percolation Time of Existing (in-situ) Soils**  
If "T" is : 1 < 20..... Use:  $\frac{Q}{10} = \frac{\text{_____}}{10} = \text{_____}$  m<sup>2</sup>  
If "T" is : 20 -- 35..... Use:  $\frac{Q}{8} = \frac{\text{_____}}{8} = \text{_____}$  m<sup>2</sup>  
If "T" is : 35 -- 50..... Use:  $\frac{Q}{6} = \frac{\text{_____}}{6} = \text{_____}$  m<sup>2</sup>  
If "T" is : > 50..... Use:  $\frac{Q}{4} = \frac{\text{_____}}{4} = \text{_____}$  m<sup>2</sup>

**OFFICE USE ONLY**

SEWAGE SYSTEM PERMIT FEES	
New Sewage system	\$450.00
New Septic Tank	\$200.00
Leaching Bed Replacement	\$250.00
Sewage system Repair	\$250.00
Leaching/Grey Water Pit	\$250.00
Compliance inspection/report	\$250.00

<b>PERMIT FEE</b>	<b>\$</b>
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<b>Fee paid</b>	<b>\$</b>	<u>Receipt#</u>
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