



Township of Algonquin Highlands
Building Department
1123 North Shore Road
Algonquin Highlands, Ontario, K0M 1J1
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Instructions for an Application for a Sewage System Permit

This Package Contains:

1. Ontario Building Code Application for a Permit to Construct or Demolish including Schedule 1 and Schedule 2
2. Proposed Sewage System Design & Calculation Sheet
3. Profile of a typical filter bed to be completed
4. Proposed Design Site Plan
5. As Constructed plan to be completed prior to final inspection

All forms provided in this package must be completed and returned to Building Department along with the following required documentation:

1. A Site Plan referencing an up to date survey, when available, or a drawing of the lot, **neatly and accurately drawn**, which shall indicate:
 - a) the dimensions of the lot (length, width);
 - b) the location and size of the proposed buildings & all existing buildings;
 - c) location of existing well(s), septic, easements (hydro, right of way etc.) & driveways;
 - d) the setbacks of proposed building(s) or addition(s) from all lot lines, road(s) and other buildings, and the high-water mark;
 - e) indicate any survey stakes that have been located;
 - f) the location and setbacks of the proposed septic tank, leaching bed and any pump chamber;
 - g) the loading area and 15m mantle;
 - h) eaves trough discharge;
 - i) topographical features including slope and direction of flow.
2. Any proposal for the use of a Class 4 treatment unit, other than a septic tanks, will require a copy of the B.M.E.C. approval for that system, and once completed will require submission of as constructed drawings and any maintenance agreement.
3. If the applicant is not the owner of the property, or there is more than one property owner, the owner(s) must provide a letter appointing the applicant as an authorized agent.
4. The required fees must accompany the application in accordance with the Township of Algonquin Highlands Fees and Charges By-law.

Note: Incomplete applications will not be accepted or reviewed and may be returned to the owner.

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information			
Building number, street name		Unit no.	Lot/con.
Municipality	Postal code	Plan number/ other description	
B. Individual who reviews and takes responsibility for design activities			
Name		Firm	
Street address		Unit no.	Lot/con.
Municipality	Postal code	Province	E-mail
Telephone number	Fax number		Cell number
C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]			
House	HVAC – House		Building Structural
Small Buildings	Building Services		Plumbing – House
Large Buildings	Detection, Lighting and Power		Plumbing – All Buildings
Complex Buildings	Fire Protection		On-site Sewage Systems
Description of designer's work			
D. Declaration of Designer			
<p>I _____ declare that (choose one as appropriate):</p> <p style="text-align: center;">(print name)</p> <p>I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4. of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.</p> <p>Individual BCIN: _____</p> <p>Firm BCIN: _____</p> <p>I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5. of Division C, of the Building Code.</p> <p>Individual BCIN: _____</p> <p>Basis for exemption from registration: _____</p> <p>The design work is exempt from the registration and qualification requirements of the Building Code.</p> <p>Basis for exemption from registration and qualification: _____</p> <p>I certify that:</p> <ol style="list-style-type: none"> 1. The information contained in this schedule is true to the best of my knowledge. 2. I have submitted this application with the knowledge and consent of the firm. <p style="text-align: center;"> _____ Date Signature of Designer </p>			

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) (c) of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of practice, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

Schedule 2: Sewage System Installer Information

A. Project Information			
Building number, street name		Unit number	Lot/con.
Municipality	Postal code	Plan number/ other description	
B. Sewage system installer			
Is the installer of the sewage system engaged in the business of constructing on-site, installing, repairing, servicing, cleaning or emptying sewage systems, in accordance with Building Code Article 3.3.1.1, Division C?			
Yes (Continue to Section C)		No (Continue to Section E)	
		Installer unknown at time of application (Continue to Section E)	
C. Registered installer information (where answer to B is "Yes")			
Name		BCIN	
Street address		Unit number	Lot/con.
Municipality	Postal code	Province	E-mail
Telephone number	Fax	Cell number	
D. Qualified supervisor information (where answer to section B is "Yes")			
Name of qualified supervisor(s)		Building Code Identification Number (BCIN)	
E. Declaration of Applicant:			
<p>I _____ declare that:</p> <p style="text-align: center;">(print name)</p> <p>I am the applicant for the permit to construct the sewage system. If the installer is unknown at time of application, I shall submit a new Schedule 2 prior to construction when the installer is known;</p> <p><u>OR</u></p> <p>I am the holder of the permit to construct the sewage system, and am submitting a new Schedule 2, now that the installer is known.</p> <p>I certify that:</p> <ol style="list-style-type: none"> 1. The information contained in this schedule is true to the best of my knowledge. 2. If the owner is a corporation or partnership, I have the authority to bind the corporation or partnership. <p>_____</p> <p style="text-align: center;">Date Signature of applicant</p>			

Proposed Sewage System Design

Class of System:	2 or 3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	<input type="checkbox"/> Install <input type="checkbox"/> Repair	Test Hole Ready:	Yes <input type="checkbox"/>	No <input type="checkbox"/>																
Water Supply:				Soil Conditions:		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th colspan="2" style="text-align: center;">SOIL CONDITION</th></tr> <tr><td style="width: 50%;">Depth (metres)</td><td style="width: 50%;">Soil Type</td></tr> <tr><td style="text-align: center;">0</td><td style="border-left: 1px solid black; border-right: 1px solid black;"> </td></tr> <tr><td style="text-align: center;">0.5</td><td style="border-left: 1px solid black; border-right: 1px solid black;"> </td></tr> <tr><td style="text-align: center;">1.0</td><td style="border-left: 1px solid black; border-right: 1px solid black;"> </td></tr> <tr><td style="text-align: center;">1.5</td><td style="border-left: 1px solid black; border-right: 1px solid black;"> </td></tr> <tr><td colspan="2">Show Rock Elevation _____</td></tr> <tr><td colspan="2">Show Water Table _____ W _____</td></tr> </table>		SOIL CONDITION		Depth (metres)	Soil Type	0		0.5		1.0		1.5		Show Rock Elevation _____		Show Water Table _____ W _____	
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Show Rock Elevation _____																							
Show Water Table _____ W _____																							
<input type="checkbox"/> Existing <input type="checkbox"/> Proposed <input type="checkbox"/> Drilled Well <input type="checkbox"/> Dug Well <input type="checkbox"/> Surface Water <input type="checkbox"/> Other: _____				Est. Perc Rate _____ min/cm Bedrock Level _____ m High Water Level _____ m Date of Assessment: _____																			

Site Information

Fixture Unit Type	Number	Fixture Unit Value	Total
Bathroom Group (3+ Fixtures)		6	
2 Piece Powder Room		5.5	
Clothes Washer		1.5	
Laundry Sink		1.5	
Kitchen Sink		1.5	
Other			
Total Fixture Units:			

Total Number of Bedrooms (includes bunkies, lofts, etc.): _____

Total Area of Living Space on Property (includes bunkies, lofts, etc.): _____ m²

Daily Sewage Flow Calculation:

- A. Base Flow from Number of Bedrooms: _____ L (max. 5)
- B. Each Additional Fixture Unit over 20: _____ x50= _____ L
- C. Additional Area of Living Space over 200m²:
- i. Each 10m² over 200m² up to 400m² : _____ x100 = _____ L
 - ii. Each 10m² over 400m² up to 600m² : _____ x75 = _____ L
 - iii. Each 10m² Greater Than 600m² : _____ x50 = _____ L
- D. Additional Bedrooms over 5: _____ x500 = _____ L

Total Daily Sewage Flow: (A + B, C, or D) = _____ L/day

Tank(s)	Minimum Required	Proposed
Septic Tank Size: Daily Sewage Flow x2 or 3	= _____ L	= _____ L

Filter Bed

Filter Bed Area: <3000L/day $Q \div 75 =$ _____ m² Proposed _____ m²

>3000L/day $Q \div 50 =$ _____ m² Proposed _____ m²

No of Pods: _____ Arranged as _____ x _____ m²

Distribution Type: Pipe Chamber Type _____

Expanded Contact Area: $QT \div 850 =$ _____ m² Proposed _____ m²

If Raised, Height above existing grade to bottom of stone layer: _____ m

OR

Conventional Trench

Daily Sewage Flow (Q) x T $\div 200 =$ _____ m Proposed: _____ m

Request for Reduction: Type _____ $Q \times T \div 300 =$ _____ m

Percolation Rate of Fill (if required): _____ min/cm

If Raised, Height above existing grade to bottom of stone layer: _____ m

Loading Rate Area = Daily Sewage Flow / Loading Rate Factor = _____ m²



TYPICAL DRAWING—FILTER BED

PLEASE COMPLETE THE BLANKS

PLAN VIEW

Is mantle required?

YES

NO

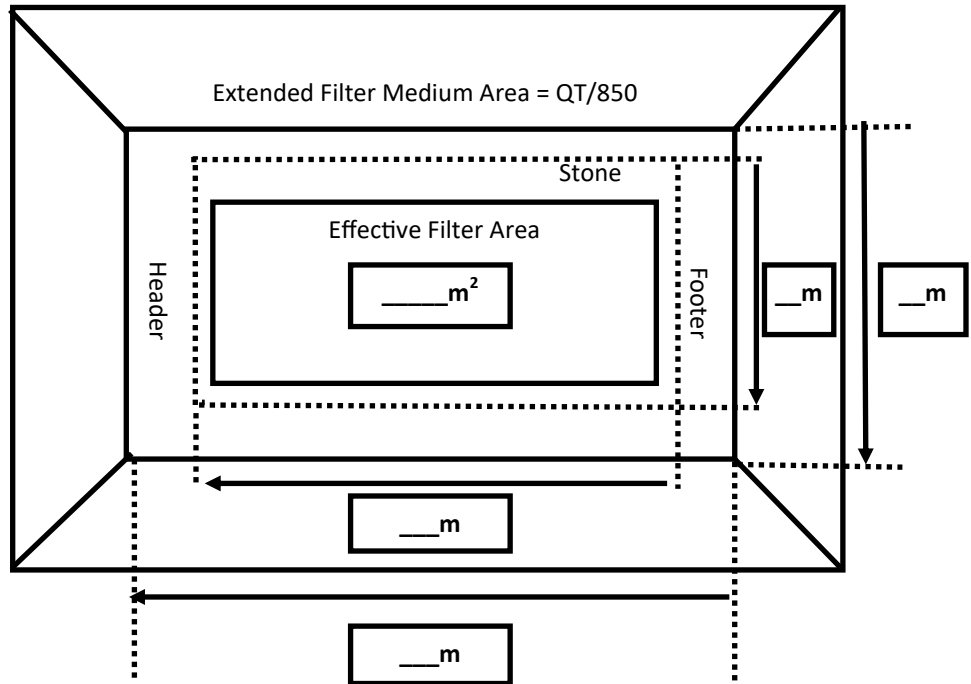
Direction _____

Total Mantle

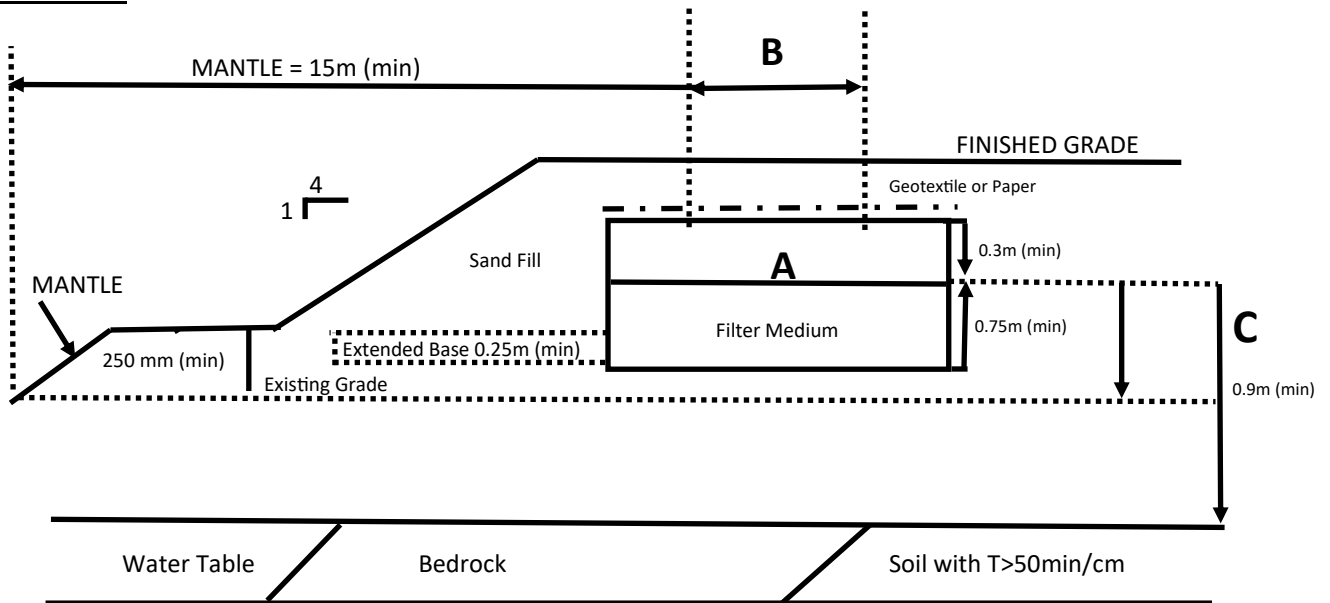
Area (m²) _____

Extended Filter Medium

Area (m²) _____



CROSS SECTION



A - Filter Bed Type (Circle One)

Pipe

Chamber

B - Proposed horizontal offset Distance between Runs _____ m

C - Proposed depth of Excavation to Water Table/Bedrock _____ m

PROPOSED DESIGN SITE PLAN

Indicate North Point and show the following required information:

- | | | |
|--------------------------------------|----------------------------|--|
| 1. Septic Tank & Leaching Bed | 7. Existing Sewage Systems | 13. Topographical Features
(Steep slopes, water course,
lake, swamps etc.) |
| 2. Pump Chamber | 8. Driveways | 14. Direction of Slope |
| 3. Loading Rate Area | 9. Property Lines | 15. Direction of Surface and
Ground Water Flow |
| 4. 15 metre Mantle Area | 10. Foundation Drain | |
| 5. Proposed/Existing Structures | 11. Eavestrough Drain | |
| 6. Water Supplies (incl. neighbours) | 12. Surface water drainage | |

Owner/Installer/Designer Name

Signature

Date

Office Use Only

Approved: Yes No File # _____

Reviewed By: _____
Sewage System Inspector Signature Date

As Constructed Plans for On-Site Sewage System

***This form must be completed and submitted prior to calling for final inspection**

Permit No: _____ Installation Date: _____

As Constructed Plans prepared by: _____

1. Size of System based on _____ Bedrooms, and/or _____ Fixture Units

Area of Building: _____ m² Total Daily Design Flow: _____ Litres

2. Septic Tank/Holding Tank working capacity _____ litres, constructed of plastic/concrete/fiber glass.

3. Distribution Pipe:

Absorption Trench: _____ *Filter Bed System:* _____ *Other:* _____

Filter Bed Area: _____ m² Filter Sand Contact Area: _____ m²

Filter Sand Tonne: _____ Number of Runs: _____

Length of Runs: _____ Metres

Trench Bed Total Lineal Metres: _____ Number of Runs: _____

Gravity: _____ Siphon: _____

Pump Make: _____ Pump Size: _____ HP

Pump Chamber Size: _____ Litres

Loading Rate Area: _____ m²

15 Metre Mantel Constructed: Yes / No

4. Commercial Details:

