



**Come for a visit. Stay for a lifestyle.**

66 Front Street South, P.O. Box 1030, Campbellford, ON, K0L 1L0  
Phone: (705) 653-1900 Fax: (705) 653-5904

## **PLEASE READ CAREFULLY**

Pages 1 and 2 of the Building Permit may be completed by the owner or the applicant.

Schedule 1: Designer Information – Must be completed by the designer.

Schedule 2: Sewage System Installer Information – Must be completed by the designer/installer.

## **BUILDING INSPECTION DEPARTMENT**

It is the responsibility of the property owner to ensure that all construction is in accordance with the Municipality of Trent Hills Building and Zoning By-laws. This office will assist in answering your questions regarding these requirements.

To acquire a Building Permit you will need:

1. **Health Approval** for new dwellings and additions to dwellings: Municipality of Trent Hills, 66 Front Street South, P.O. Box 1030, Campbellford, Ontario, K0L 1L0  
Telephone (705) 653-1900

**Municipal Services (Water and Sewer)** Services hook up permit from the Municipality of Trent Hills.

2. **Entrance Permit** from Municipality of Trent Hills, the County of Northumberland or a County Road Setback Permit.

◆ For the Municipality, apply to the office.

◆ For the County, apply to:

County of Northumberland  
860 William Street  
Cobourg, Ontario  
K9A 3A9  
1-800-354-7050

3. **Sketch of Survey or Site Plan** of your lot must show:

- (a) location of the lot in the Municipality (Lot and Concession);
- (b) complete lot dimensions;
- (c) existing buildings and dimensions;
- (d) proposed building or construction with dimensions and distance from lot lines;
- (e) showing creek, stream, drainage ditch or any water courses.

4. **Construction Plans:** Two complete detailed plans showing all aspects of the construction.

5. **A permit** will be required from the Lower Trent Conservation if property within the regulated area.

6. **Plumbing Permit** – This is issued at the same time as the building permit and is based on the number of plumbing fixtures in the building.

# Application for a Permit to Construct or Demolish

This form is authorized under subsection 8(1.1) of the Building Code Act.

<b>For use by Principal Authority</b>			
Application number:		Permit number (if different):	
Date received:		Roll number:	
Application submitted to: _____ (Name of municipality, upper-tier municipality, board of health or conservation authority)			
<b>A. Project information</b>			
Building number, street name		Unit number	Lot/con.
Municipality	Postal code	Plan number/other description	
Project value est. \$		Area of work (m <sup>2</sup> )	
<b>B. Purpose of application</b>			
<input type="checkbox"/> New construction <input type="checkbox"/> Addition to an existing building <input type="checkbox"/> Alteration/repair <input type="checkbox"/> Demolition <input type="checkbox"/> Conditional Permit			
Proposed use of building		Current use of building	
Description of proposed work			
<b>C. Applicant</b> Applicant is: <input type="checkbox"/> Owner or <input type="checkbox"/> Authorized agent of owner			
Last name		First name	Corporation or partnership
Street address		Unit number	Lot/con.
Municipality	Postal code	Province	E-mail
Telephone number (    )	Fax (    )		Cell number (    )
<b>D. Owner (if different from applicant)</b>			
Last name		First name	Corporation or partnership
Street address		Unit number	Lot/con.
Municipality	Postal code	Province	E-mail
Telephone number (    )	Fax (    )		Cell number (    )

<b>E. Builder (optional)</b>				
Last name		First name	Corporation or partnership (if applicable)	
Street address			Unit number	Lot/con.
Municipality		Postal code	Province	E-mail
Telephone number ( )		Fax ( )		Cell number ( )
<b>F. Tarion Warranty Corporation (Ontario New Home Warranty Program)</b>				
i. Is proposed construction for a new home as defined in the <i>Ontario New Home Warranties Plan Act</i> ? If no, go to section G.			<input type="checkbox"/> Yes	<input type="checkbox"/> No
ii. Is registration required under the <i>Ontario New Home Warranties Plan Act</i> ?			<input type="checkbox"/> Yes	<input type="checkbox"/> No
iii. If yes to (ii) provide registration number(s): _____				
<b>G. Required Schedules</b>				
i) Attach Schedule 1 for each individual who reviews and takes responsibility for design activities.				
ii) Attach Schedule 2 where application is to construct on-site, install or repair a sewage system.				
<b>H. Completeness and compliance with applicable law</b>				
i) This application meets all the requirements of clauses 1.3.1.3 (5) (a) to (d) of Division C of the Building Code (the application is made in the correct form and by the owner or authorized agent, all applicable fields have been completed on the application and required schedules, and all required schedules are submitted). Payment has been made of all fees that are required, under the applicable by-law, resolution or regulation made under clause 7(1)(c) of the <i>Building Code Act, 1992</i> , to be paid when the application is made.			<input type="checkbox"/> Yes	<input type="checkbox"/> No
ii) This application is accompanied by the plans and specifications prescribed by the applicable by-law, resolution or regulation made under clause 7(1)(b) of the <i>Building Code Act, 1992</i> .			<input type="checkbox"/> Yes	<input type="checkbox"/> No
iii) This application is accompanied by the information and documents prescribed by the applicable by-law, resolution or regulation made under clause 7(1)(b) of the <i>Building Code Act, 1992</i> which enable the chief building official to determine whether the proposed building, construction or demolition will contravene any applicable law.			<input type="checkbox"/> Yes	<input type="checkbox"/> No
iv) The proposed building, construction or demolition will not contravene any applicable law.			<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>I. Declaration of applicant</b>				
I _____ declare that:				
(print name)				
1. The information contained in this application, attached schedules, attached plans and specifications, and other attached documentation 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.				
Date		Signature of applicant		

Personal information contained in this form and schedules is collected under the authority of subsection 8(1.1) of the *Building Code Act, 1992*, and will be used in the administration and enforcement of the *Building Code Act, 1992*. Questions about the collection of personal information may be addressed to: a) the Chief Building Official of the municipality or upper-tier municipality to which this application is being made, or, b) the inspector having the powers and duties of a chief building official in relation to sewage systems or plumbing for an upper-tier municipality, board of health or conservation authority to whom this application is made, or, c) Director, Building and Development Branch, Ministry of Municipal Affairs and Housing 777 Bay St., 2nd Floor. Toronto, M5G 2E5 (416) 585-6666.

## Schedule 2: Sewage System Installer Information

<b>A. Project Information</b>			
Building number, street name		Unit number	Lot/con.
Municipality	Postal code	Plan number/ other description	
<b>B. Sewage system installer</b>			
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?			
<input type="checkbox"/> Yes (Continue to Section C)		<input type="checkbox"/> No (Continue to Section E)	<input type="checkbox"/> Installer unknown at time of application (Continue to Section E)
<b>C. Registered installer information (where answer to B is "Yes")</b>			
Name		BCIN	
Street address		Unit number	Lot/con.
Municipality	Postal code	Province	E-mail
Telephone number (    )	Fax (    )	Cell number (    )	
<b>D. Qualified supervisor information (where answer to section B is "Yes")</b>			
Name of qualified supervisor(s)		Building Code Identification Number (BCIN)	
<b>E. Declaration of Applicant:</b>			
I _____ declare that:			
(print name)			
<input type="checkbox"/> 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;			
<u>OR</u>			
<input type="checkbox"/> 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.			
I certify that:			
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.			
_____		_____	
Date		Signature of applicant	

## SECTION B – FOR SEWAGE SYSTEMS

Will more than one sewage system be used?    Yes  No  Total # of bedrooms on the property \_\_\_\_\_  
 Total floor area of all dwellings (Provide copies of floor plans as required) \_\_\_\_\_  
 Total fixture units within all buildings on the property (Taken from Section "A" see previous page) \_\_\_\_\_  
 Total daily design flow rate (Expressed in Litres/Day)(Determine from above & charts provided) \_\_\_\_\_  
 Describe the Sewage System area    Vegetation \_\_\_\_\_    Depth to High Water Table \_\_\_\_\_

Describe the soil to bedrock/Hardpan \_\_\_\_\_ Potential to flood    Yes  No

Type of Soil (e.g. medium sand, clay, sandy silt, etc) \_\_\_\_\_ Slope \_\_\_\_\_  
 Percolation time if soil used in the bed (expressed in min/cm)(refer to the Building Code)    T = \_\_\_\_\_  
 Describe mantle (Downslope area below sewage system)    Vegetation \_\_\_\_\_

Proper soil is existing  or Must be imported     Depth \_\_\_\_\_  
 Describe type of soil to be used \_\_\_\_\_ Estimated "T" time \_\_\_\_\_  
 Propose to construct (refer to above info and to the Building Code and/or info sheets and charts provided)

**Class 2 Graywater Pit**    Wall Structure: Concrete Block     Rock     Other \_\_\_\_\_  
 Dimensions of Pit    Length \_\_\_\_\_ Width \_\_\_\_\_ Height \_\_\_\_\_ Type of Cover \_\_\_\_\_  
 Type of Class 1 to be used:    Privy  Composting  Chemical  Electrical  Other

**Class 4 Filter Bed**    Proof of Approved Filter Material must be provided  
 Dug into existing soil  or Raised     If raised, how far above the existing soils? \_\_\_\_\_  
 Area of Filter Medium (sq. m) \_\_\_\_\_ # of runs of tile \_\_\_\_\_ Header  or Distribution Box   
 Use Existing Tank  or New CSA Standard  Concrete  Polyethylene     Size (L) \_\_\_\_\_

**Class 4 Trench Bed** Dug into Existing Soil  or Raised     If raised, how far above existing soils? \_\_\_\_\_  
 Total length of tile (M)    # of runs of tile    Header  or    Distribution Box   
 Use Existing Tank  or New CSA Standard  Concrete  Polyethylene     Size (L) \_\_\_\_\_

**Other Septic**    Describe \_\_\_\_\_

**Class 5 (Holding Tank)**    A pump out contract must be provided    Steel     Polyethylene     Other \_\_\_\_\_  
 Size (L) \_\_\_\_\_ Alarm is audio  and Visual     Describe Platform \_\_\_\_\_  
 For any of above is a pump required? Yes  No  if Yes ⇨ Head \_\_\_\_\_ Run \_\_\_\_\_ Horsepower \_\_\_\_\_

CONTRACTORS BUSINESS LICENCE # \_\_\_\_\_ ON SITE SUPERVISORS LICENCE # \_\_\_\_\_

**ALL APPLICATIONS UNDER THIS SECTION MUST INCLUDE:**

- ⇒ A DETAILED SITE PLAN WHICH LOCATES ALL FEATURES AND STRUCTURES WITH ALL DISTANCES INDICATED DRAWN TO SCALE.
- ⇒ INCLUDE THE FOLLOWING ON THE SITE PLAN  
 PROPERTY LINES AND TOPOGRAPHIC FEATURES – Water courses/bodies, cliffs, bare rock, unsuitable, disturbed or compacted areas, slope degree and direction of surface drainage flow  
 EXISTING AND PROPOSED STRUCTURES: All buildings, driveways, existing right of ways, utility easements, wells (state if dug, bored, drilled, include all neighbours)  
 EXISTING AND PROPOSED SEWAGE SYSTEMS – Tank and tile field orientation distribution lines, mantle area, details of existing system if it remains in use, access routes for system maintenance.

**PRIOR TO CONSTRUCTION, ARRANGE FOR AN INSPECTOR TO APPROVE THE PROPOSED SITE AND SEWAGE SYSTEM. FEES FOR SEWAGE SYSTEM PERMITS AND INSPECTIONS ARE DETAILED IN SCHEDULE "A" OF THE BUILDING BY-LAW**

## THE CHARTS PROVIDED BELOW ARE FOR GUIDANCE PURPOSES ONLY

You should always refer to the Ontario Building Code for current construction requirements.

<b>TOTAL DAILY DESIGN FLOW RATES FOR RESIDENTIAL OCCUPANCY "Q"</b>		
<b>Dwellings</b>	<b>Litres/day</b>	<b>Example of how to determine flow rate:</b>
(a) 1 bedroom dwelling	750	Using a 4 bedroom, 235m <sup>2</sup> home with 22 fixture units. From Chart on left
(b) 2 bedroom dwellings	1100	4 bedroom home > 200m <sup>2</sup> or
(c) 3 bedroom dwellings	1600	> 20 fixture units = 2,000 L/day
(d) 4 bedroom dwellings	2000	additional 35m <sup>2</sup> = 400 L/day
(e) 5 bedroom dwellings	2500	(additional 2 fix. Units = 100 L/day)
(f) additional flow for		
(1) each bedroom over 5	500	⇒ Q (total design flow rate) = 2400 Litres/day
(2) each 10 m <sup>2</sup> (or part thereof) over 200m <sup>2</sup> ...	100	If, as in the example above, there is a choice in arriving at the flow rate (e.g. fixture units vs. floor area) use the <u>one</u> calculation that provides the greatest daily flow rate value.
(3) each fixture unit of 20 fixture units .....	50	

### APPROXIMATE SOIL PERCOLATION RATES

The following are estimated typical ranges of "T" times. On-site soil conditions may significantly alter actual "T" times.

Soil Type	Clean Med-Coarse Sand	Mixed Clayey Sandy Gravels	Mixed Silty Sands & Sandy Silts	Mixed Sandy Clays & Clayey Sands or Organic Silts	Silty Clays	Clay
"T" (min/cm)	1 3	6 8	10 16	20 25	29 33	38 44 50+

### SIZING FORMULAS FOR COMPONENTS OF SEPTIC SYSTEMS BASED ON TOTAL DAILY DESIGN FLOW RATES

<b>Class 4 Filter Bed</b> (surface area of filter medium in sq. metres)	If daily flow rate is < 3,000 L/day /75 If daily flow rate is > 3,000 L/day /50 Minimum area of filter medium = 10m <sup>2</sup> Maximum area of filter medium = 50m <sup>2</sup>	<b>Example using the total flow rate above:</b> Flow rate = 2,400 L/day (which is <3000 L/day) ⇒ A (area of bed) = 2400 / 75 = 32 m <sup>2</sup> Note: If area exceeds 50 m <sup>2</sup> , 2 beds are required.
<b>Class 4 Trench Bed</b> (total length of distribution pipe in metres)	Formula for conventional beds without secondary treatment units: $L = QT / 200$ where: L is total length of pipe Q is total daily design flow rate T is soil percolation rate Minimum length of tile = 40 metres	<b>Example using the total flow rate above:</b> Q = 2400 L/day (flow rate from above) T = 6 min/cm (if using "typical" med-coarse sand) L (total length of distribution pipe) = QT / 200 ⇒ L = (2,400 x 6/200) = 72 metres
<b>Septic Tank</b> (Litres)	Tank(s) must have a minimum working capacity of 2 X's the daily design flow rate. Minimum tank size = 3600 Litres	<b>Example using the total flow rate from above of 2,400 L/day then the minimum tank size would be:</b> ⇒ Total Working Capacity 2 x 2400 = 4800 Litres

### CLEARANCE DISTANCES FOR COMPONENTS OF SEWAGE SYSTEMS (METRES)

If the bed is raised, add 2 metres for every 1 metre of rise	WELLS (with 6m casing)	WELLS (not 6 m casing)	SPRINGS POTABLE	SPRINGS NOT POTABLE	SURFACE WATER (lake, river, etc.)	PROPERTY LINES	DWELLINGS STRUCTURES
Class 4 Distribution Pipe	15	30	30	15	15	3	5
Class 4 Septic Tank	15	15	15	15	15	3	1.5
Class 5 Holding Tank	15	15	15	15	15	3	1.5
Class 1 Privy	15	30	30	15	15	3	
Class 2 Greywater Pit	10	15	15	15	15	3	

**NOTE: THAT IT IS AN OFFENCE UNDER THE ONTARIO BUILDING CODE ACT TO ALTER OR CONSTRUCT A SEWAGE SYSTEM OR AN ASSOCIATED DWELLING WITHOUT A BUILDING PERMIT**

⇒ **PROCEDURE FOR CONSTRUCTING A SEWAGE SYSTEM:**

1. Please direct any inquiries with respect to an application for a Sewage System Building Permit to the Building Department of the Municipality of Trent Hills.
2. Arrange for a pre-construction site inspection with the Building Inspector. Where percolation tests are to be conducted (minimum 3 pits) they must be reviewed and verified by the Inspector. Permit and/or Inspection Fees must be paid prior to all inspections.
3. After your lot is inspected and if it is approved, a Sewage System Building Permit will be processed. If the proposal is determined to be unsuitable, alternatives must be discussed with the Inspector or Plans Examiner.
4. The sewage system shall be constructed by a licenced contractor as required under the Code. The Permit lists the stages of construction at which inspections are required. Prior to each stage being reached, contact the Building Inspector and arrange for the required site inspection.

**NOTE THAT IT IS AN OFFENCE UNDER THE ONTARIO BUILDING CODE ACT TO USE A CLASS 2, 3, 4 OR 5 SEWAGE SYSTEM WITHOUT APPROVED FINAL INSPECTION.**

IN ORDER TO PROCESS YOUR APPLICATION, THE FOLLOWING INFORMATION IS REQUIRED.

<b>SECTION A – FOR PLUMBING</b>					
<b>COMPLETE THE FOLLOWING TABLE</b>					
<b>DESCRIPTION</b>	<b>TOTAL #</b>	<b>X</b>	<b>FIXTURE UNITS</b>	<b>=</b>	<b>TOTAL FIXTURE UNITS</b>
WATER CLOSET (FLUSH TANK TOILET)		X	4	=	
EACH SINK OR WASH BASIN		X	1.5	=	
BATHTUB AND/OR SHOWER		X	1.5	=	
DISHWASHER		X	1.5	=	
CLOTHES WASHING MACHINE		X	1.5	=	
SINGLE OR DOUBLE LAUNDRY TUB		X	1.5	=	
OTHER		X		=	
OTHER		X		=	
OTHER		X		=	
<b>TOTAL FIXTURE UNITS</b>				=	

THIS APPLICATION DOES NOT INCLUDE WATER PURIFIER OR WATER SOFTENER.

# CALCULATION SHEET

## ONTARIO BUILDING CODE PROPOSED REQUIREMENTS RESIDENTIAL SEWAGE DISPOSAL SYSTEM

Name: \_\_\_\_\_

### Sewage Flow

Number of bedrooms: \_\_\_\_\_ = \_\_\_\_\_ Litres

#### ADD

(a) Living Space: \_\_\_\_\_ m<sup>2</sup>

Each 10m<sup>2</sup> over 200 m<sup>2</sup> up to 400 m<sup>2</sup> \_\_\_\_\_ x 100 = \_\_\_\_\_ Litres

Each 10m<sup>2</sup> over 400 m<sup>2</sup> up to 600 m<sup>2</sup> \_\_\_\_\_ x 75 = \_\_\_\_\_ Litres

TOTAL: \_\_\_\_\_ Litres

#### OR ADD (whichever is the larger flow)

(b) Total Fixture Units:

Each Fixture Unit over 20: \_\_\_\_\_ x 50 = \_\_\_\_\_ Litres

TOTAL SEWAGE FLOW (Q) (ADD 1+2 OR 3) \_\_\_\_\_ Litres

### 1. Septic Tank Size

Residential Occupancy: Sewage Flow \_\_\_\_\_ x 2 = \_\_\_\_\_ Litres (Minimum 3600 Litres)

### 2. Percolation Rate from Test Hole Soil Conditions (T)

Time = \_\_\_\_\_ min/cm

### 3. Leaching Bed Size

Length of Pipe =  $\frac{\text{Sewage Flow} \times \text{Percolation Time}}{200}$

$L = \frac{QT}{200} = \frac{\text{_____} \times \text{_____}}{200} = \text{_____ m of trench} \text{ _____ ft of trench}$

### 4. Filter Bed Size

Sewage Flow < 3600 Litres/Day: Sewage Flow ÷ 75 = m<sup>2</sup>

\_\_\_\_\_ + 75 = \_\_\_\_\_ m<sup>2</sup> of filter bed

Sewage Flow > 3600 Litres/Day: Sewage Flow + 50 = m<sup>2</sup>

\_\_\_\_\_ + 50 = \_\_\_\_\_ m<sup>2</sup> of filter bed

### 5. Filter Bed Contact Area of Filter Sand

Area =  $\frac{\text{Sewage Flow} \times \text{Percolation Time}}{850} = \text{_____ m}^2 \text{ filter sand contact area}$

$A = \frac{QT}{850} = \frac{\text{_____} \times \text{_____}}{850} = \text{_____ m}^2 \text{ filter sand contact area}$

Expanded filter sand contact area is to be no less than the filter bed size

### 6. Loading Rate for Fill-Based Absorption Trenches and Filter

Beds	Loading Rates	Percolation Time	Loading Rate (L/m <sup>2</sup> /Day)
		1-20	10
		20-35	8
		35-50	6
		>50	4

Sewage Flow + Loading Rate = m<sup>2</sup> of 250 mm of unsaturated soil or leaching bed fill

\_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_ m<sup>2</sup> of 250 mm of unsaturated soil or leaching bed fill

#### TEST HOLE SOIL CONDITIONS

Depth (metres)	Soil Type
0 _____	
0.5 _____	
1.0 _____	
1.5 _____	
Show Rock Elevation _____	
Show Water Table _____	
Spring HWT	