



Box 357, #7 Milne Street
Minden, Ontario KOM 2K0
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Procedures for an Application for a Sewage System Permit

This Package Contains:

1. Minden Hills Application for a Sewage System Permit
2. Ontario Building Code Application for a Permit to Construct or Demolish
3. Proposed Sewage Disposal System Design Form
4. Calculation Sheet
5. Ontario Building Code and Guide Sheet
6. Building and Sewage System Permit Fee Schedule

The following forms must be completed and returned to Minden Hills-Building/Planning/Bylaw Dept along with the following other required documentation to complete the application:

1. Minden Hills Application for a Sewage System Permit
Note: Owner's signature must be provided or a letter from the owner appointing an Authorized Agent.
2. Ontario Building Code Application for a Permit to Construct or Demolish
3. Proposed Sewage Disposal System Design Form for sewage systems described in the Ontario Building Code. Other approved sewage systems (B.M.E.C. approved) will require the design, B.M.E.C. Approval, and once completed as-built drawings.
4. A Site Plan referenced to an up to date survey when available or to a drawing of the lot, neatly and accurately drawn, which shall include:
 - a) the dimensions of the lot (length, width);
 - b) the location and size of the proposed buildings & all existing buildings;
 - c) location of well, septic, easements (hydro, right of way etc) & driveways;
 - d) the setbacks of proposed building or addition from all lot lines, the road and other buildings, the high water mark and the well and septic system;
 - e) indicate any survey stakes that have been located;
 - f) the location and setbacks of the septic tank, leaching bed and any pump chamber;
 - g) the loading area and 15 m mantle;
 - h) location of wells or water supply including neighbours;
 - i) eaves trough discharge;
 - j) topographical features including slope and direction of flow.
5. The required fee.

The Building Code Act does not allow the issuance of permits based on incomplete applications.

Sewage System Inspectors can only provide comments based on complete applications and plans.

Incomplete applications will be returned to the Owner, or their Authorized Agent.

Once the completed application has been reviewed, an inspector will visit the property to inspect the test hole and site. The applicant will be either issued a permit to install the system or the reasons provided as to why a permit cannot be issued. Information provided in this package is limited, and it is the responsibility of the applicant to ensure compliance with all applicable sections of the Ontario Building Code.

Application for a Permit to Construct or Demolish

This form is authorized under subsection 8(1.1) of the *Building Code Act, 1992*

For use by Principal Authority			
Application number:		Permit number (if different):	
Date received:		Roll number: 4616 042 000 24400	
Application submitted to: <u>MINDEN HILLS</u> (Name of municipality, upper-tier municipality, board of health or conservation authority)			
A. Project information			
Building number, street name 4713 GELEERT RD		Unit number	Lot/con.
Municipality MINDEN	Postal code K0M 2K0	Plan number/other description	
Project value est. \$		Area of work (m ²)	
B. Purpose of application			
☒ New construction ☐ Addition to an existing building ☐ Alteration/repair ☐ Demolition ☐ Conditional Permit			
Proposed use of building		Current use of building	
Description of proposed work REPLACE SEPTIC SYSTEM TO ACCOMMODATE PROPOSED CONSTRUCTION			
C. Applicant			
Applicant is: ☒ Owner or ☒ Authorized agent of owner			
Last name TOWN OF MINDEN HILLS		First name TIM LEWIS	
Street address 7 MILNE ST		Unit number	Lot/con.
Municipality MINDEN	Postal code K0M 2K0	Province ON	E-mail
Telephone number (705) 286 1260 ext 528		Fax ()	Cell number ()
D. Owner (if different from applicant)			
Last name FLETCHER		First name CYNTHIA	
Street address 7 MILNE ST		Unit number	Lot/con.
Municipality MINDEN	Postal code K0M 2K0	Province ON	E-mail cfletcher@minden hills.ca
Telephone number (705) 286 1260 ext 505		Fax ()	Cell number ()

E. Builder (optional)				
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 ()
F. Tarion Warranty Corporation (Ontario New Home Warranty Program)				
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.			☐ Yes	☒ No
ii. Is registration required under the <i>Ontario New Home Warranties Plan Act</i> ?			☐ Yes	☒ No
iii. If yes to (ii) provide registration number(s): _____				
G. Required Schedules				
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				
H. Completeness and compliance with applicable law				
i) This application meets all the requirements of clauses 1.3.1.3 (5) (a) to (d) of Division C of the <i>Building Code</i> (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).			☒ Yes	☐ No
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.			☒ Yes	☐ 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> .			☒ Yes	☐ 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.			☒ Yes	☐ No
iv) The proposed building, construction or demolition will not contravene any applicable law.			☒ Yes	☐ No
I. Declaration of applicant				
I, <u>TIM LEWIS</u> , (print name)			declare that:	
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.				
FEB 11 / 26 Date				

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 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 <u>4713 GELEERT RD</u>				Unit no.	Lot/con.
Municipality <u>MINDEN</u>		Postal code <u>K0M 2K0</u>	Plan number/ other description		
B. Individual who reviews and takes responsibility for design activities					
Name <u>CLAUDIA KRAUSE</u>			Firm <u>TOWN OF MINDEN HILLS</u>		
Street address <u>7 MILNE ST</u>				Unit no.	Lot/con.
Municipality <u>MINDEN</u>		Postal code <u>K0M 2K0</u>	Province <u>ON</u>	E-mail <u>ckrause@mindenhills.ca</u>	
Telephone number <u>(709) 286 1260 ext 517</u>		Fax number <u>()</u>		Cell number <u>()</u>	
C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]					
☐ House ☐ Small Buildings ☐ Large Buildings ☐ Complex Buildings		☐ HVAC – House ☐ Building Services ☐ Detection, Lighting and Power ☐ Fire Protection		☐ Building Structural ☐ Plumbing – House ☐ Plumbing – All Buildings ☒ On-site Sewage Systems	
Description of designer's work <u>REPLACE EXISTING SEPTIC SYSTEM TO ACCOMMODATE PROPOSED CONSTRUCTION</u>					
D. Declaration of Designer					
I <u>CLAUDIA KRAUSE</u> declare that (choose one as appropriate): (print name)					
☒ 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. Individual BCIN: <u>27033</u> Firm BCIN: _____					
☐ 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. Individual BCIN: _____ Basis for exemption from registration: _____					
☐ The design work is exempt from the registration and qualification requirements of the Building Code. Basis for exemption from registration and qualification: _____					
I certify that:					
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.					
<u>FEB 11 / 26</u> Date					

NOTE:

- 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.
- 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 4713 GELERT RD		Unit number	Lot/con.
Municipality MINDEN	Postal code R0H 2K0	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 TOWN OF MINDEN HILLS		BCIN	
Street address 7 MILNE ST		Unit number	Lot/con.
Municipality MINDEN	Postal code R0H 2K0	Province ON	E-mail ckrause@mindenhills.ca
Telephone number (75) 2861260 ext 517	Fax ()	Cell number ()	
D. Qualified supervisor information (where answer to section B is "Yes")			
Name of qualified supervisor(s) Claudia Krause		Building Code Identification Number (BCIN) 27033	
E. Declaration of Applicant:			
I <u>TIM LEWIS</u> declare that:			
(print name)			
☒ 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;			
OR			
☒ 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 FEB 11 / 26			

PROPOSED DESIGN SITE PLAN

Indicate North Point and label the following required information:

1. Septic Tank & Leaching Bed	8. Driveways / Parking Area
2. Pump Chamber	9. Property Lines
3. Loading Rate Area	10. Foundation / Eavestrough Drainage
4. 15 metre Mantle Area	11. Lake / watercourse / pond
5. Proposed/ Existing Structures	12. Steep slopes
6. Water Supplies (incl. neighbours)	13. Direction of slope/water flow
7. Existing Sewage Systems	

please see attached

Designer Name

Signature

Date

Office Use Only

Site Visit Complete:

☐

Yes

☐

No

Date

Approved:

☐

Yes

☐

No

File #

Reviewed By:

Sewage System Inspector

Date

Proposed Sewage System Design

Property Address:				Roll Number:			
Class of System:	2 or 3	4	5	☐ Install ☐ Repair	Test Hole Ready	Yes ☒	NO ☐
	☐	☒	☐				

Water Supply: ☒ Existing ☐ Proposed ☒ Drilled Well ☐ Dug Well ☐ Surface Water ☐ Other: _____	Soil Conditions: Est. Perc Rate <u>5-10</u> min/cm Sieve Analysis: ☐ Yes ☒ No Bedrock Level _____ m High Water Table <u>2m+</u> m Level (below grade)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2">SOIL CONDITIONS</th> </tr> <tr> <th>Depth (metres)</th> <th>Soil Type</th> </tr> <tr> <td>0</td> <td rowspan="5" style="text-align: center; vertical-align: middle;"> <u>Sand / trace silt</u> </td> </tr> <tr><td>0.5</td></tr> <tr><td>1.0</td></tr> <tr><td>1.5</td></tr> <tr><td></td></tr> <tr> <td colspan="2">Show rock elevation <u>SURFACE</u></td> </tr> <tr> <td colspan="2">Show water table <u>2m+</u></td> </tr> </table>	SOIL CONDITIONS		Depth (metres)	Soil Type	0	<u>Sand / trace silt</u>	0.5	1.0	1.5		Show rock elevation <u>SURFACE</u>		Show water table <u>2m+</u>	
SOIL CONDITIONS																
Depth (metres)	Soil Type															
0	<u>Sand / trace silt</u>															
0.5																
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Show rock elevation <u>SURFACE</u>																
Show water table <u>2m+</u>																

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		<u>1.5</u>	
Kitchen Sink		1.5	
Other		1.5	

SEE ATTACHED CALCULATIONS

Total Fixture Units: _____

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

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

Daily Sewage Flow Calculation:

- A. Base Flow from Number of Bedrooms (Max 2500 L): _____
- B. Additional Bedrooms over 5: _____ x 500 L = _____
- C. Each Additional Fixture Unit over 20: _____ x 50 L = _____
- D. Living Space up to 200m²:
- a) Each 10m² over 200m² up to 400m²: _____ x 100L = _____
- b) Each 10m² over 400m² up to 600m²: _____ x 75L = _____
- c) Each 10m² over 600m²: _____ x 50L = _____

Total Daily Sewage Flow (Q): A. + the greater of B., C., D.) = _____ L/day

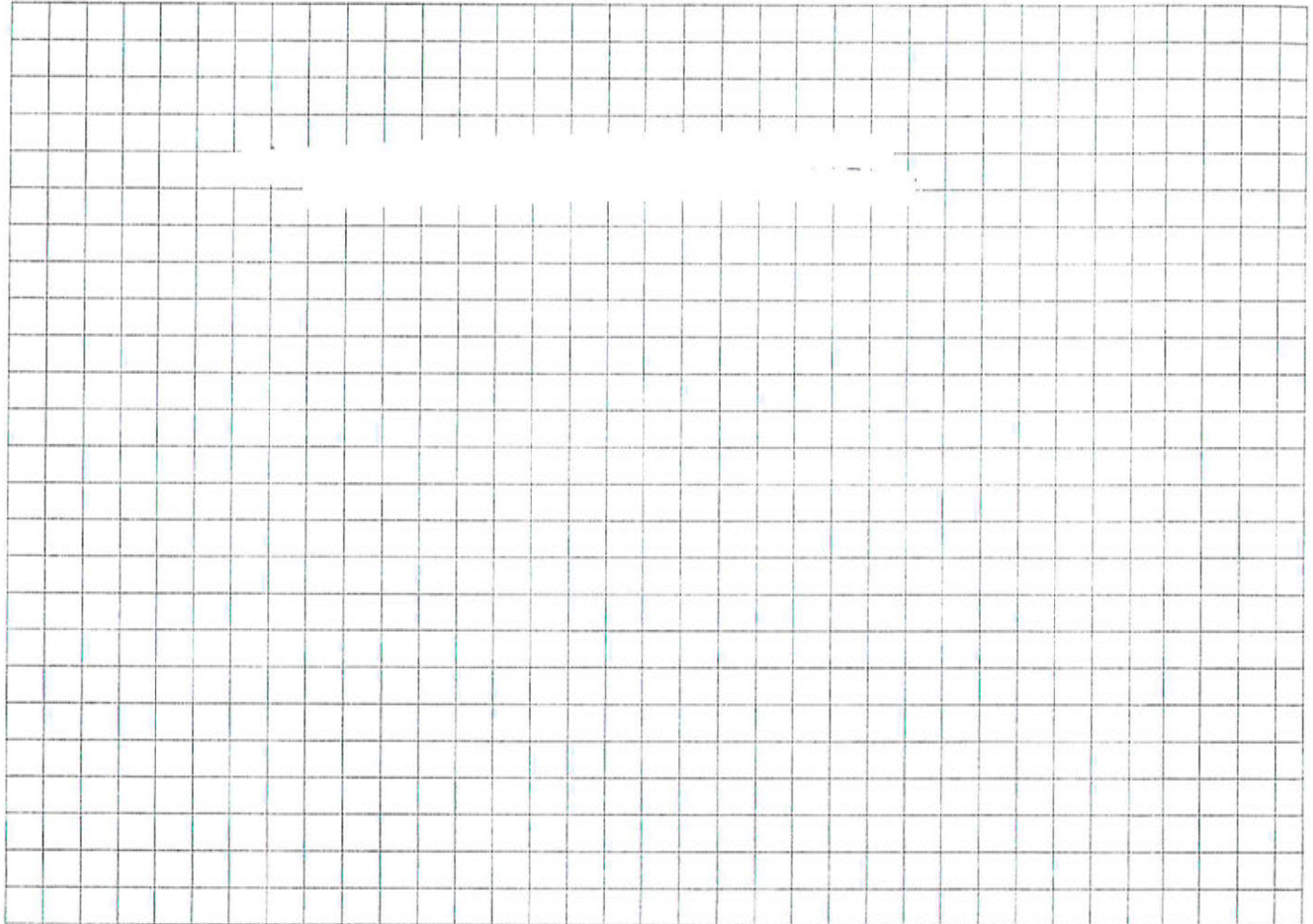
Tank(s): Septic Tank Size: Daily Sewage Flow (Q) x <u>3</u> = <u>8100</u> L	Minimum Required = <u>8100</u> L	Proposed = <u>9500</u> L
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Filter Bed		
Filter Bed Area: <3000L/day DSF/75= <u>36</u> m ²	☐	>3000L/day DSF/50= _____ m ²
Proposed <u>45</u> m ²		
# of Pods: <u>1</u>	Arranged as <u>5.3</u> x <u>8.5</u> m = <u>45</u> m ²	
Distribution Type: ☐ Pipe	☒ Chambers	Arranged as <u>6</u> runs of <u>7.5</u> m Total <u>45</u> m
Expanded Contact Area: QT/850 = <u>31.8</u> m ²	Proposed <u>45</u> m ²	
If Raised, Height above existing grade to top of filter sand area: <u>N/A</u> m		

AS BUILT SITE PLAN

Indicate North Point and label the following required information:

1. Septic Tank & Leaching Bed	8. Driveways / Parking Area
2. Pump Chamber	9. Property Lines
3. Loading Rate Area	10. Foundation / Eavestrough Drainage
4. 15 metre Mantle Area	11. Lake / watercourse / pond
5. Proposed/ Existing Structures	12. Steep slopes
6. Water Supplies	13. Direction of slope/water flow
7. Existing Sewage Systems	



Installer/ Site Supervisor	Signature	Date

<u>Septic Tank Information</u>		
Size	Manufacturer	Model
<u>Septic Field Information</u>		
Distribution Pipe (Circle One):	Chamber	OR Pipe
Filter Bed Dimensions	×	=
OR		
Absorption Trench	Runs of	m = m
Pump Chamber Size:	Pump Model#	

Conventional Trench

Daily Sewage Flow (DSF) x T / 200 = _____ m Proposed: _____ m
Request for Reduction: Type _____ DSF x T / 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 = 270 m² Proposed: _____ m²

Receiving Soil Percolation Rate	Loading Rate Factor
1 < T ≤ 20	<u>10</u>
20 < T ≤ 35	8
35 < T ≤ 50	6
T > 50	4

15m Extended Mantel Required: ☐ Yes ☐ No ☒ Native

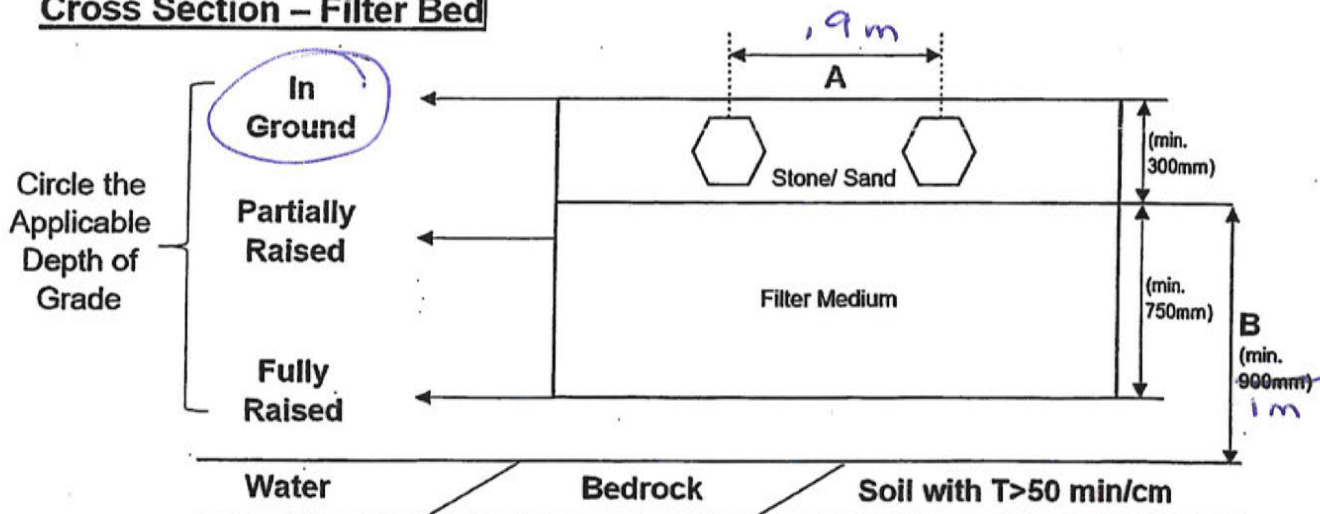
Higher Treatment Level Proposed? Details:

Manufacturer _____ Model _____ BMEC/BNQ Authorization _____ # Units _____

Method of Headerline and Distribution Pipe Detection:

☒ magnetic means ☐ tracer wire ☐ other, please specify _____

Cross Section – Filter Bed



A – Proposed horizontal offset Distance between Runs _____ m

B – Proposed depth of Excavation to Water Table/ Bedrock _____ m



Ontario Building Code & Guides

Table 7.4.9.3.
Minimum Permitted Size of Fixture Outlet Pipe
and Hydraulic Loads for Fixtures

Fixture	Min. Size of Fixture Outlet Pipe, in.	Hydraulic Load, fixture units
Autopsy table	1½	2
Bathroom group		
a) with flush tank		6
b) with direct flush valve		8
Bathlup (with or without shower)	1½	1½
Bathlup: foot, sitz, or slab	1½	1½
Bed pan washer	3	6
Beer cabinet	1½	1½
Bidet	1½	1
Chinese range	1½	3
Clothes washer		
a) domestic	N/A	1½ with 1½ in. trap
b) commercial	N/A	2 with 1½ in. trap
Dental unit or cuspidor	1½	1
Dishwasher		
a) domestic	1½	no load when connected to garbage grinder or domestic sink
b) commercial type	2	3
Drinking fountain	1½	½
Fish tank or tray	1½	1½
Floor drain	2	2 with 2 in. trap 3 with 3 in. trap
Garbage grinder	2	3
Icebox	1½	1
Laundry tray		
a) single or double units or 2 single units with common trap	1½	1½
b) 3 compartments	1½	2
Lavatory		
a) barber or beauty parlor	1½	1½
b) dental	1½	1
c) domestic type single, or 2 single with common trap	1½	1 with 1½ in. trap 1½ with 1½ in. trap
d) multiple or industrial type	1½	3
Potato Peeler	2	3
Shower drain		
a) from 1 head	1½	1½
b) from 2 or 3 heads	2	3
c) from 4 to 6 heads	3	6
Sink		
a) domestic and other small type with or without garbage grinders, single, double, or 2 single with a common trap	1½	1½
b) other sinks	1½	1½ with 1½ in. trap 2 with 2 in. trap 3 with 3 in. trap
Urinal		
a) pedestal, siphon jet or blowout type	2	4
b) stall, washout type	2	2
c) wall		
i) washout type	1½	1½
ii) other types	2	3
Water closet		
a) with flush tank	3	4
b) with direct flush	3	6

Table 8.2.1.3.A.
Residential Occupancy

Residential Occupancy	Volume (litres)
Apartments, Condominiums, Other Multi-family Dwellings - per person ¹	275
Boarding Houses	
a) Per person,	
i) with meals and laundry facilities, or	200
ii) without meals or laundry facilities, and	150
b) Per non-resident staff per 8 hour shift	40
Boarding School - per person	300
Dwellings	
a) 1 Bedroom Dwelling	750
b) 2 Bedroom Dwelling	1100
c) 3 Bedroom Dwelling	1600
d) 4 Bedroom Dwelling	2000
e) 5 Bedroom Dwelling	2500
f) Additional flow for ²⁾	
i) each bedroom over 5,	500
ii) A) each 10 m ² (or part thereof) over 200 m ² up to 400 m ² ³⁾ , and	100
B) each 10 m ² (or part thereof) over 400 m ² up to 600 m ² ³⁾ , and	75
C) each 10 m ² (or part thereof) over 600 m ² ³⁾ , or	50
iii) each fixture unit over 20 fixture units	50
Hotels and Motels (excluding bars and restaurants)	
a) Regular, per room	250
b) Resort hotel, cottage, per person	500
c) Self-service laundry, add per machine	2500
Work Camp/Construction Camp, semi-permanent per worker	250

Table 8.2.1.5.
Clearance Distances for Sewage Systems

Clearance Distances for Class 1, 2 and 3 Sewage Systems				
	Minimum horizontal distance in metres from a spring used as a source of potable water or well other than a well with watertight casing to a depth of at least 6 m.	Minimum horizontal distance in metres from a lake, river, pond, stream, reservoir, or a spring not used as a source of potable water.	Minimum horizontal distance in metres from a Property Line.	
Earth Pit	15	30	15	3
Privy				
Privy	10	15	10	3
Vault				
Pail Privy				
Greywater System	10	15	15	3
Cesspool	30	60	15	3

Septic design for Lochlin Community Centre

Proposed 75 seats

assembly hall = 36 l / seat

$36 \times 75 = 2700 \text{ l / day}$

Septic tank

$2700 \times 3 = 8100 \text{ l}$

Filter bed

CA $2700 / 75 = 36 \text{ m}^2$ proposed 45 m^2

$5.3 \text{ m} \times 8.5 \text{ m} = 45 \text{ m}^2$

6 runs of 7.5m ARC 18 Chambers
= 45m

ECA $2700 \times 10 / 850 = 31.8 \text{ m}^2$ proposed 45 m^2

Native Mantel

Septic tank - 4323.00

ARC 18 chambers (30) 2034.00

ends (12) 256.80

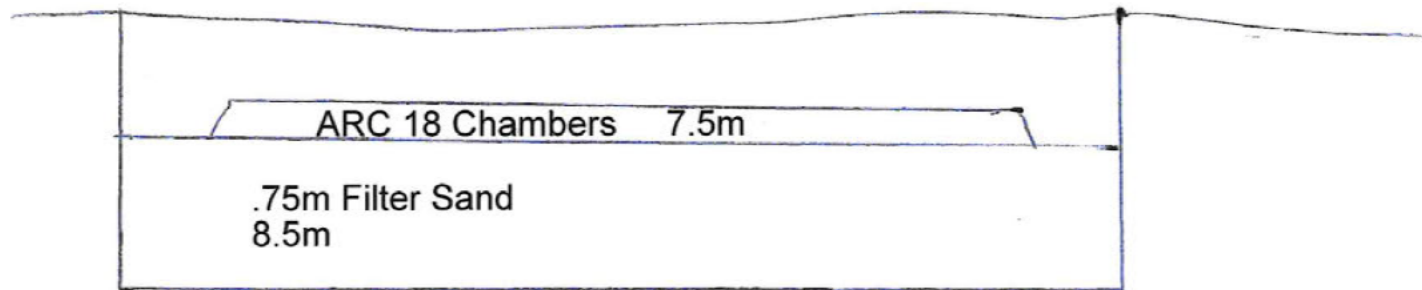
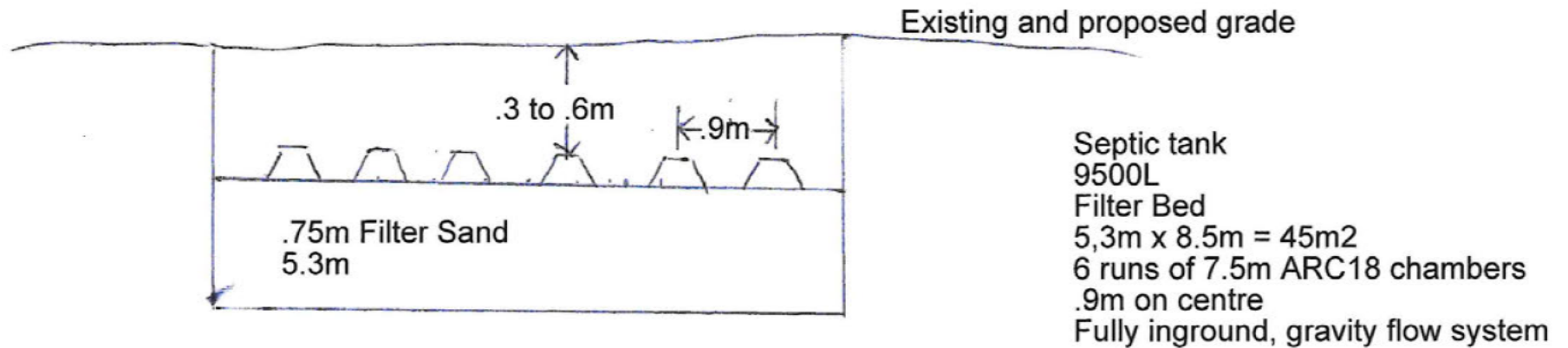
4" Pipe + fittings
(48', 4 90's, 7 t's)
glue 200.00

Filter Sand (32.50/T) 54 tonnes = 1755 picked up
(delivery \$150/hr) 5 yards stone - \$500

Materials - \$9068
+ tax

Sand price from
Total Site Services,

Septic design for 4713 Gelert Rd.
Lochlin Community Centre



Pipe to be minimum 3m from any property line,
5m from any structure, 15m from any drilled well and
30m from any dug well
Tank to be minimum 3m from any property line,
1.5m from any structure, and 15m from any well.

Feb 11 / 26