Directions to building site	Map
…… …… …… …… …… …… …… …… …… ……	

Soils Certification

I,_____(Licensed Installer under Section 3.3 of the Building Code Act), verify that the material used in the construction of the sewage system, under the permit herein, meets the requirements of the Ontario Building Code, the percolation rate identified on the permit and the soils analysis submitted to Faraday Township from:

_____
(Name of pit)

Note: *Leaching bed fill* means soil used for the construction of conventional and chamber leaching beds, filter beds, dispersal beds, and area beds as prescribed under specific Building Materials Evaluation Commission authorizations. It may not include a requirement for other soils as prescribed by treatment unit manufacturers; check with the manufacturer before installation. The silt content of leaching bed fill must be included in the analysis.

Faraday Township may require you to submit soil samples for analysis.

_____ _____
Licensed installer's signature Date

Owner Authorization

I/we,_____, being the legal owner(s) of the property described as Lot _____,

Concession_____, Parts(s)/Sublot(s)_____ of Registered Plan of Survey/Subdivision_____, in the

Municipality of Faraday Township, located at Civic Address_____,

certify that_____ is authorized to submit an

Application to Construct or Demolish for the purposes of installing a sewage system in accordance with Ontario Regulation 332/12, and to act as my/our representative for any associated site inspections.

I/we certify that all information and material provided for the purpose of this application is accurate.

Signature of legal owner(s):_____

Sewage System Calculation Page

1. Daily design sewage flow (DDSF) (Q)

See Table 1 – DDSF values for bedrooms_____(litres per day) **(A)**

Total floor area_____(metres^2)

For every 10 metres^2 or part thereof over 200 metres^2, up to 400 metres^2 x 100 =_____(litres per day)

For every 10 metres^2 or part thereof over 400 metres^2, up to 600 metres^2 x 75 =_____(litres per day)

For every 10 metres^2 or part thereof over 600 metres^2 _____x 50 =_____(litres per day)

Total DDSF for floor area_____(litres per day) **(B)**

See Table 2 - Total fixture units _____

Each fixture unit over 20_____x 50 =_____(litres per day) **(C)**

DDSF (Q) =_____**(A)** +_____**(larger of (B) or (C))** =_____(litres per day) **(Q)**

2. Leaching bed size (metres)

Conventional - Total length of distribution pipe **(L)** = **(Q x T)** ÷ 200
Treatment systems or chambers - Total length of distribution pipe **(L)** = **(Q x T)** ÷ 300

Total length of distribution pipe (L) = **(**_____**(Q)** x_____**(T))** Percolation time of native or imported soil ÷ **(200 or 300)** =_____(metres)

3. Filter bed loading area (metres^2)

If Q ≤ 3000 litres per day, use Q ÷ 75
If Q > 3000 litres per day, use Q ÷ 50
Level II-IV treatment unit only, use Q ÷ 100

Loading area =_____**(Q)** ÷_____**(75, 50 or 100)** =_____ (metres^2)

4. Filter bed contact area (metres^2)

Contact area = **(Q x T)** ÷ 850

Contact area = **(**_____**(Q)** x_____**(T))** ÷ 850 =_____(metres^2)

Use T of native soil; if contact area < loading area, use loading area for both values

5. Shallow buried trenches (metres)

See Table 4 - Shallow buried trench length

(L) =_____**(Q)** ÷_____**(75, 50 or 30)** =_____metres

6. Type A dispersal bed (metres^2)

Stone layer
If Q ≤ 3000 litres per day, use **Q** ÷ 75
If Q > 3000 litres per day, use **Q** ÷ 50

Stone layer =_____**(Q)** ÷_____**(75 or 50)** =_____(metres^2)

Sand layer
If T is between 1 and 15 use **(Q x T)** ÷ 850
If T is greater than 15 use **(Q x T)** ÷ 400

Sand layer = **(**_____**(Q)** x_____**(T))** ÷ **(850 or 400)** =_____(metres^2)

Use T of native soil; if sand layer area < stone layer area, use stone layer area for both values

7. Type B dispersal bed (metres^2)

Area = **(Q x T)** ÷ 400

Area = **((Q)**_____x_____**(T))** ÷ 400 =_____(metres^2)

Linear loading rate
If T < 24 minutes, use 50 litres per minute
If T ≥ 24 minutes, use 40 litres per minute

Pump chamber capacity (Q) =_____(litres)

Table 1 – DDSF values for bedrooms
(Ontario Building Code, Division B, Part 8, Table 8.2.1.3.A)

Bedrooms	Litres per day	Bedrooms	Litres per day
1	750	4	2000
2	1100	5	2500
3	1600	Per bedroom over 5	500

Table 2 – Fixture units
(Ontario Building Code, Division B, Part 7, Table 7.4.9.3)

	Number of units	Total
Bathroom group (3 to 4 piece bathroom)	____x 6.0 =	_____
Bathtub (with or without shower)	____x 1.5 =	_____
Toilet	____x 4.0 =	_____
Clothes washer	____x 1.5 =	_____
Dishwasher	____x 1.0 =	_____
Laundry tubs	____x 1.5 =	_____
Shower drain	____x 1.5 =	_____
Sinks	____x 1.5 =	_____
Other	____x . =	_____
	Total =	_____

Table 3 – Loading rates for fill based absorption trenches and filter beds
(Ontario Building Code, Division B, Part 8, Table 8.7.4.1)

Percolation time (T) of soil (minutes)	Loading rates (litres per metres^2) per day
1 < T ≤ 20	10
20 < T ≤ 35	8
35 < T ≤ 50	6
T > 50	4

Table 4 – Shallow buried trench length
(Ontario Building Code, Division B, Part 8, Table 8.7.3.1)

Percolation time (T) of soil (minutes)	Length of distribution pipe (metres)
1 < T ≤ 20	Q ÷ 75 metres
20 < T ≤ 50	Q ÷ 50 metres
50 < T < 125	Q ÷ 30 metres

NOTE: This approval expires 12 months after the date of issue.

Sewage System Specifications Page

OFFICE USE ONLY	Application number
Name	Date Submitted
Fee number	Fee amount
Renewal date	Date entered

Structure ❑ New ❑ Existing ❑ Residential ❑ Commercial

If the sewage system is non-residential, attach a separate copy of the specifications and plans.

Number of bedrooms _____

Number of fixture units _____

Total finished area _____ (metres^2) ❑ Including walkout basement

Daily design sewage flow (Q) _____(litres per day) Account for backwash water from any water treatment unit (i.e. water softener)

Septic tank capacity (2 x Q) _____(litres) (minimum of 3600 litres)

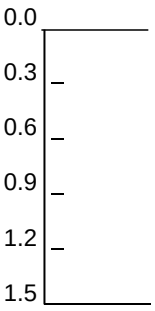
Water supply ❑ Proposed ❑ Existing ❑ Drilled Well ❑ Dug, bored, or blasted well ❑ Municipal ❑ Surface water

Casing depth____(metres) ❑ Sandpoint or drivepoint ❑ Cistern ❑ Shore well

Soils

Indicate soil types (sand, silt, clay), bedrock, and the high ground water table below.

Test Pit (metres)



Estimated percolation rate of native soil

T =_____ (minutes per centimeter)

Tested percolation rate of imported soil

T = _____ (minutes per centimeter)

Method of subsurface detection

❑ Magnetic
❑ Tracer wire (14 gauge plastic coated)
❑ Other _____

Holding tank capacity (7 x Q)

(Class 5 only)
(minimum of 9000 litres)

_____ (litres)

Class 4 sewage system type

❑ Conventional leaching bed
❑ Chamber system leaching bed
❑ Filter media bed
❑ Building Materials Evaluation Committee area bed
❑ Shallow buried trenches*
❑ Type A dispersal bed*
❑ Type B dispersal bed*

* These sewage systems **require** a Level IV treatment unit certified to the CAN/BNQ 3680-600 standard, or a treatment unit described in Supplementary Standard SB-5.

Treatment unit

❑ Level II ❑ Level III ❑ Level IV
❑ Service agreement provided
Manufacturer _____
Model_____
❑ Building Materials Evaluation Committee authorization provided

Conventional leaching bed

(minimum 40 metres)

Total distribution pipe_____(metres)

❑ Mantle required ❑ Pump required

Chamber system leaching bed

(minimum 40 metres)

Total chamber length_____(metres)
Manufacturer_____
Model_____
Number of pieces _____

❑ Mantle required ❑ Pump required

Filter media bed

Loading area_____(metres^2)
Contact area_____(metres^2)
Total distribution pipe_____(metres)

❑ Mantle required ❑ Pump required

Shallow buried trenches

(minimum 30 metres)

Total trench length_____(metres)

Building Materials Evaluation Committee area or type A dispersal bed

Stone layer area_____(metres^2) Sand layer area_____(metres^2) ❑ Mantle required

Type B dispersal bed Stone layer area_____(metres^2) Linear loading rate ❑ 50 litres per metre ❑ 40 litres per metre
Pump chamber capacity_____(litres)

Loading rate (from Table 3) =_____(Q) ÷_____(litres per metres^2 per day) =_____area (metres^2)

Recommendations or conditions (for office use only)

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NOTE: This approval expires 12 months after the date of issue.

Office Use Only
Application number
Name

Sewage System Plans Page

Lot diagram and sewage system plan (drawing must be accurate, to scale, indicate north point and show the following):
(a) Location of sewage system components (e.g. tank(s), leaching bed(s), etc). Locate and show horizontal distances from system to adjacent existing or proposed buildings, water supplies (including neighbours), existing on-site systems, driveways, property lines, lakes, rivers, springs, water courses, swimming pools.
(b) Lot dimensions topographic features (e.g., swamps, steep slopes) near system.

Benchmark 1 square =_____(metres or feet) **DRAW TO SCALE**

Sewage System Cross Section (For new sewage systems only)

❑ Approved ❑ Rejected (See recommendations on previous page)

Inspector:_____ Date: _____

Chief Building Official:_____ Date: _____

Permit to install a Class 2, 3, 4, 5 Sewage System under section 8-(1) (2) of the Building Code Act, S.O. 1992, C.23. This permit is issued to the owner to construct, install, alter, extend, enlarge or continue to use a Class_____sewage system. Any person who is not issued a permit may apply to the Building Code Commission for any issues involving the Building Code or Compliance to the Code.

NOTE: This approval expires 12 months after the date of issue.