SEWAGE SYSTEM INSTALLATION PROPOSAL

TOTAL # OF BEDROOMS :	3	TOTAL FLOOR AREA :	189.52 m²
TOTAL PLUMBING FIXTURE UNITS:	17	"T" TIME OF SOIL:	12
TOTAL DAILY DESIGN FLOW RATE (Expressed in Litres/day):	1600		Q=1600

Septic Tank Size =Q X 2 = 1600 X 2 = 3200 Litres (Minimum 3600 litres)

Absorption Trenches = (length of distribution pipe) = QT/200 = _____ m (Minimum 40 meters)

Filter Bed area = Q/75 (Q< 3000 l) = 21.33 square meters or Q/50 (Q>3000l) = _____ square meters

Base of Filter medium + QT/850 = _____ square meters

Mantle area = Q/ loading rate = _____ square meters

T	LOADING RATE
1 - 20	10
20 - 35	8
35 - 50	6
OVER 50	4

PROPOSE TO CONSTRUCT:

[X] **CLASS 4 FILTER BED** PROOF OF APPROVED FILTER MATERIAL MUST BE PROVIDED PRIOR TO FINALINSPECTION

Dug Into Existing Soil	X	Raised	✓	If Raised, How Far Above Existing Soils?	.25 metres	Mantle Area	21.33 m²		
Area Of Filter Medium	m²	Base of Filter	m²	Or total length of tile		Number of runs			
Use Existing Tank		New CSA Standard	X	Treatment Unit Other than septic tank		Working Capacity	3600 litres		

[ ] **CLASS 2 GREY-WATER PIT or CLASS 3 CESSPOOL**

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 5 - HOLDING TANK - PUMP OUT CONTRACT MUST BE PROVIDED (District Approval Required)**

Concrete		Polyethylene		Other:			
Size (L)		Alarm Is – Audio		And Visual		Describe Platform:	

IS A PUMP REQUIRED?

Yes		No	X	Raw Sewage		Effluent	

SEPTIC TANK FILTER DETAILS:

EFFLUENT FILTER INSTALLED

ALL APPLICATIONS MUST INCLUDE A SITE PLAN WHICH LOCATES ALL FEATURES AND STRUCTURES WITH ALL DISTANCES INDICATED, DRAWN TO SCALE, REFERENCING A PLAN OF SURVEY.

INCLUDE THE FOLLOWING ON THE SITE PLAN:

☐ **PROPERTY LINES & TOPOGRAPHIC FEATURES:**
Water courses/Water bodies/swamps, cliffs, bare rock, slope degree & direction.

☐ **EXISTING & PROPOSED STRUCTURES**
All buildings, driveways, utility easements, wells (state: dug, bored or drilled - include neighbours). Installer to verify locations prior to installation of sewage system.

☐ **EXISTING & PROPOSED SEWAGE SYSTEM(S)**
Tank & tile field orientation, distribution lines, mantle area, details of existing system if it remains in use, water lines and test pit.

TEST HOLE	Sub-surface conditions encountered			
	Rock & G.W.T.	Depth (m)	Soil Type	"T" Time
	TOPSOIL	- 0 -		
		- 0.25 -		
		- 0.50 -		
		- 0.75 -		
	SAND	- 1.00 -	SAND	12
		- 1.25 -		
		- 1.50 -		

Schedule 2: Sewage System Installer Information

A. Project Information

Building number, street name			Unit number	Lot/con.
201 DEER LAKE RD				PT LOT 26 CONC-4
Municipality	**Postal code**	**Plan number/ other description**		
HUNTSVILLE/PT SYDNEY	P0B 1L0	PART 1 OF PLAN RP 35R 2492		

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	
BILL SMITH			31953	
Street address			**Unit number**	**Lot/con.**
RR# 1 75 BELLEVIEW AVE				
Municipality	**Postal code**	**Province**	**E-mail**	
PORT SYDNEY	P0B 1L0	ONTARIO		
Telephone number	**Fax**		**Cell number**	
(705) 788-6186	( )		( )	

D. Qualified supervisor information (where answer to section B is "Yes")

Name of qualified supervisor(s)	Building Code Identification Number (BCIN)
BILL SMITH	31953

E. Declaration of Applicant

I BILL SMITH 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.

JUNE 21 2010 — B

Date — Signature of applicant

THE CHARTS BELOW ARE FOR GUIDANCE PURPOSES ONLY
You should always refer to the Ontario Building Code for current regulations.

TOTAL DAILY DESIGN FLOW RATES FOR RESIDENTIAL OCCUPANCY "Q" (Litres/Day)

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:	
i) each bedroom over 5	500
ii) A) each 10 m^2 (or part thereof) over 200 m^2 up to 400 m^2	100
B) each 10 m^2 (or part thereof) over 400 m^2 up to 600 m^2	75
C) each 10 m^2 (or part thereof) over 600 m^2	50
iii) each fixture unit over 20	50

Example of how to determine daily design flow rate:

Using a 4 bedroom, 235 m^2 home with 22 fixture units.

4 bedroom home>200 m^2 or >20 fixture units.

4 bedrooms = 2000 *l*/day
Additional 35 m^2 = 400 *l*/day
Additional fixture units (2) = 100 *l*/day
Q = 2,400 litres/day

If, as in the example, there is a choice in arriving at the flow rate (i.e. fixture units vs floor area) use the one calculation that provides the greatest daily flow rate value.

APPROXIMATELY SOIL PERCOLATION RATES "T"

The following are estimated typical ranges of "T" times. Actual "T" times may vary significantly due to on site soil conditions.

Soil Type →	Clean Medium - Course Sand	Silty Gravely Sands	Silty Sands Sandy Silts	Sandy Silty Clays	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

Class 4 Filter Bed (Surface area of filter medium in square metres)	If daily flow rate is <3000 *l*/day ÷75 If daily flow rate is >3000*l*/day ÷ 50 Minimum area of filter medium = 10 m^2 Maximum area of filter medium = 50 m^2	Example using the total flow rate from above. Flow rate = 2000 *l*/day Area of Bed (A) = 2,400 ÷ 75 = 32m^2
Class 4 Trench Bed (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	Example using the total flow rate from above: Q = 2,400 *l*/day T = 6 min/cm (if using typical med-course Sand) L = (total length of distribution pipe) =QT ÷ 200 L = (2,400 x 6) ÷200 = 72 metres
Septic Tank (litres – *l*)	Tank(s) must have a minimum working capacity of 2 times the daily design flow rate. MINIMUM TANK SIZE = 3,600 *l*	Example using the total flow rate from above Of 2,400 litres per day then the minimum tank size would be : 2 x 2,400 *l* = 4,800 *l*

CLEARANCE DISTANCES FOR COMPONENTS OF SEWAGE SYSTEMS (metres)

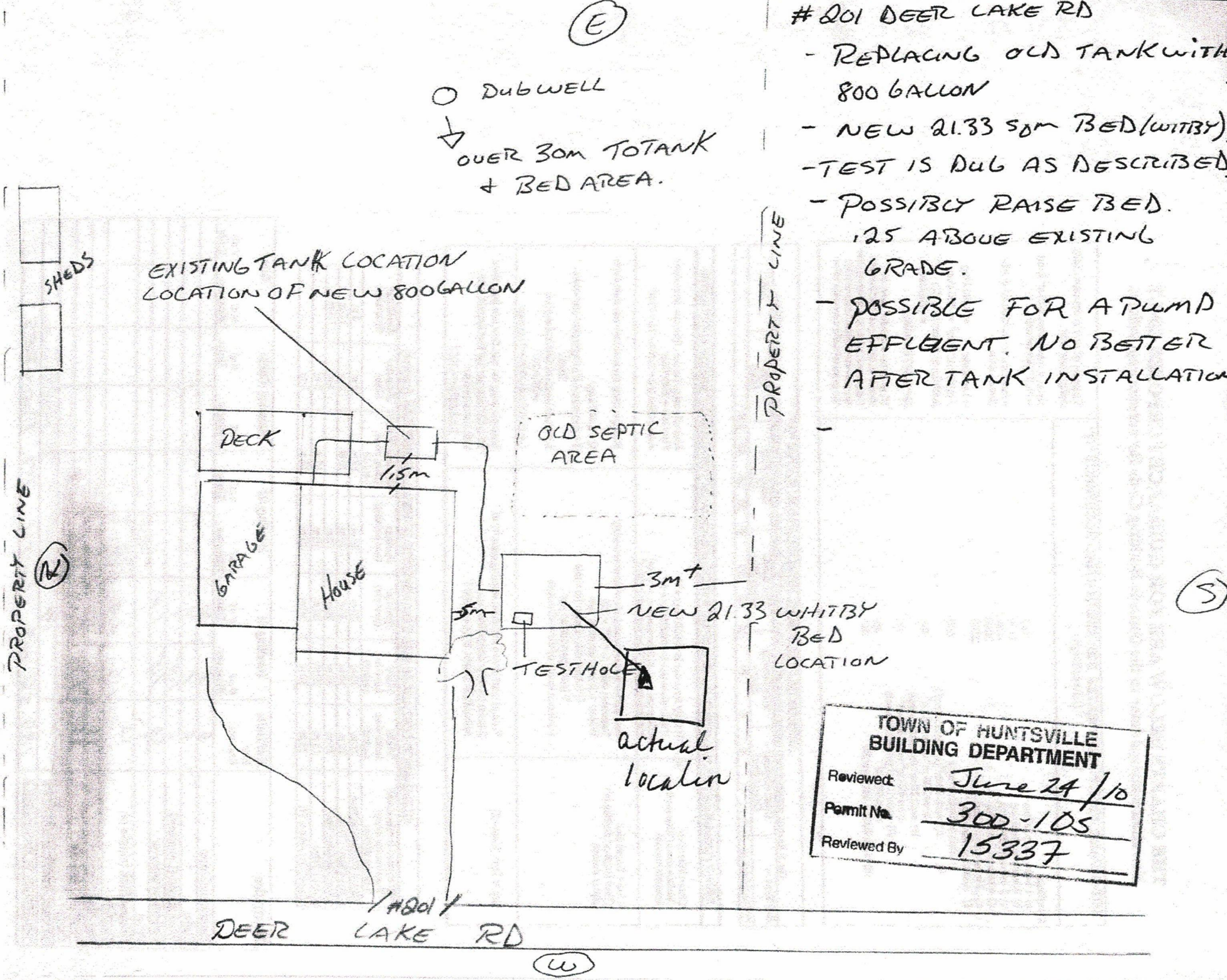
**If the bed is raised add 2 metres for every 1 metre of rise.	Wells (with 6 m casing)	Wells (no 6 m casing)	Springs (potable)	Springs (not potable)	Surface Water (lake, river, etc...)	Property Lines	Dwellings/ Structures
Class 4 Distribution Pipe	15 m	30 m	30 m	30 m	15 m	3 m	5 m
Class 4 Septic Tank	15 m	30 m	30 m	15 m	15 m	3 m	1.5 m
Class 5 Holding Tank	15 m	30 m	30 m	15 m		3 m	1.5 m
Class 1 Privy	15 m	30 m	30 m	30 m	15 m	3 m	
Class 2 Grey-water Pit	15 m	30 m	30 m	15 m	15 m	3 m	

Description	# of Units Per Fixture	Dwelling #1		Dwelling #2		Sleeping Cabin		Other	
		# of Fixtures	# of Units	# of Fixtures	# of Units	# of Fixtures	# of Units	# of Fixtures	# of Units
Bathroom Group	6	1	6						
Toilet	4	1	4						
Wash Basin (Lavatory)	1	1.5	1						
Bathtub or Shower	1.5	1.5	1.5						
Bidet	1								
Kitchen Sink (single or double)	1.5	1.5	1.5						
Bar Sink	1.5								
Washing Machine	1.5	3.0	3.0						
Other									
TOTAL FIXTURE UNITS			17						
FINISHED FLOOR AREA	189.52 m2 WITH 17 FIXTURES								

(E)

#201 DEER LAKE RD

- REPLACING OLD TANK WITH 800 GALLON
- NEW 21.33 sqm BED (WITBY)
- TEST IS DUG AS DESCRIBED
- POSSIBLY RAISE BED. .125 ABOVE EXISTING GRADE.
- POSSIBLE FOR A PUMP EFFLUENT. NO BETTER AFTER TANK INSTALLATION
-



TOWN OF HUNTSVILLE
BUILDING DEPARTMENT
Reviewed: June 24/10
Permit No. 300-105
Reviewed By 15337