

## **RECEIPT OF RECORD OF SEWERAGE SYSTEM**

This receipt acknowledges that the Health Authority has received a completed Record of Sewerage System for the following location:

**RECEIPT NUMBER FOR RSS FILING FEE:** 10431274

TAX ASSESSMENT ROLL NUMBER: 20-789-08340.010

AUTHORIZED PERSON: Melnychuk, Natalya

CIVIC ADDRESS: 2560 Eagle Bay Rd., Blind Bay, BC

LEGAL DESCRIPTION: Lot 1, Plan KAP57413, Section 30, Township 22, Range 10, Meridian W6 (Kamloops Div of Yale Land District)

EFFECTIVE DATE: 2025-Jun-24

Please note that the system work must be completed and a Letter of Certification filed with the Health Authority within two years of the effective date noted.

EXPIRY DATE: 2027-Jun-24



# **RECORD OF SEWERAGE SYSTEM**

					Filing # (	OFFICE USE	ONLY)			
1. Pro Info	operty ormation	New Construction     Alteration		n	🗆 Repa	Repair   Amendment – Original Filing		Filing #		
		Tax Assessment Roll # 20-789-08340.010				PID # 023-503-840				
	egal Description (Plan, Lot, District Lot, Block Numbers) Lot 1, Plan KAP57413, Section 30, Township 22, Range 10, Meridian W6 (Kamloops Div of Yale Land District)									
		Street (Civic) Address or 2560 Eagle Bay Rd.	General Loca	ition			City Blind Bay			
2. Ow	ner Information	ion Name of Legal Owner				g Address Eagle Bay Rd.				
		Phone		City Blind Bay	-			Prov BC	Postal C V0E	
	thorized Person ormation	Name of Authorized Person Melnychuk, Natalya				lailing Address 262 Eagle Bay Rd				
		Phone 7789295396		City Blind Bay	•			Prov BC	Postal C V0E	
0			Email natalyamelr	ail alyamelnychuk@gmail.com						
4. Structure Information		Sewerage System Will Serve:  Single Family Dwelling  Other Dwelling/Structure (specify)								
		The sewerage system is designed for an estimated minimum daily domestic sewage flow of (check one)								
		■ Less than or equal to 9,100 litres								
5. Site Information Depth of native soil to seasonal high water table or restrictive layer										
		GPS Location of System	(decimal degree	es) Latitude	50.9	07338	Longitude119.3	72989		
		Horizontal Accuracy (m)_	23				Recreational (		Different	
	nking Water tection	Will the sewerage system be located less than 30 m from a well?								
110		If yes, attach a professional's report and specify the intended distance(m)								
	Distance of proposed sewerage system to the closest body of surface water (m)									
7. Sys Info	ormation	Sewerage treatment met	hod 🗷 Typ	e 1 🗆 Typ	be 2 🗌	Туре 3				
	jal or gulatory nsiderations	Construction of the proposed sewerage system will not conflict with legal instruments registered on the property. Is this filing submitted as the result of an order from the Health Authority?  Yes (attach a copy of the order)  No			he 🗷 No					
	t Plan and	Plot Plan (to scale) and specifications are attached 🔀 Yes 🗆 No								
Spe	ecifications	The plans and specifications are consistent with Standard Practice Source of Standard Practice: Ministry of Health Standard Practice Manual Other								
	thorized	Signature (email submission does not require a signature)					OFFICE USE ONLY			
	son's nature	Melnychuk, Natalya				Filing Accepted Date 2025-Jun-24				
		Date 2025-Jun-21				Receipt # 10431274				

#### Health Authority Initial Filing for Construction of Sewerage System:

#### Site Investigation Report, Record of Design and Specifications

Date: June 21, 2025

Legal Description: Lot 1, Plan KAP57413, Section 30, Township 22, Range 10, Meridian W6, Kamloops Div of Yale Land District

Street Address: 2560 Eagle Bay Road, Blind Bay B.C.

GPS Location: 50.907338, -119.372989

#### Property Owner:

#### Summary of Proposed Works:

New Type 1 onsite wastewater system to serve a full-time residence that is 4 bedrooms, 372m<sup>2</sup> with 6 regular residents and a seasonal occupancy of up to 10 people.

Proposed wastewater system:

- Daily Design Flow: 2500L/day.
- Type 1 effluent
- Existing 800IG tank as initial trash tank followed by new 1400 IG single compartment tank (RKS1400LP/1); effluent filter installed in outlet
- D-box gravity distribution trenches.

#### Site Information:

Total parcel size: 5.635 Acres

Potable Water Source: Municipal

Topography: The proposed dispersal system alignment is on a contour with a 0-5% slope perpendicular to the bed centreline.

General Description: The proposed dispersal area and new tank location is undeveloped. The existing 800IG tank will also be used in sequence with a new tank. Soils in the proposed area for the sewerage system are characterized as favorable sandy loam soils. There are no intermittent water bodies or water coursed located on the land parcel. There are no wells within 30m; however, there is an easement for the CSRD Water Utility and the Shuswap Lake High Water Mark is 60m distance.

#### Site/Soil Evaluation: conducted June 4, 2025 (see attached drawing for test pit locations)

Native soil in area of proposed dispersal field:

#### Test pit #1:

0-20cm	Dark brown sandy loam texture with organic content (topsoil)			
20-	20- <i>Texture:</i> Sandy Loam			
160cm Structure: mod grade granular				
Consistence: loose				
Coarse fragments:20%				
<i>Roots:</i> common; fine				
<i>Colour:</i> 7.5yr 3/2				
Mottling or Gleying: none				
Moisture: moist				
The VS limiting condition in TP1 is design limit				
• Pe	<ul> <li>Permeameter testing adjacent to TP1 (AH1 &amp;2) was approximately 600mm/day</li> </ul>			
(average between the two tests) in the 'B' Horizon (36cm depth)				

#### Test pit #2

0-10cm	0cm Dark brown sandy loam texture with organic content (topsoil)			
10- 150cm	Texture: Sandy Loam			
Structure: mod grade blocky				
Consistence: friable				
Coarse fragments:20%				
<i>Roots:</i> few fine <i>Colour:</i> 7.5 yr 5/3				
			Mottling or Gleying: none	
	<i>Moisture:</i> dry			
• The VS limiting condition in TP2 is the design limit.				
• Pern	<ul> <li>Permeameter testing adjacent to TP1 (AH3 &amp;4) was approximately 800 mm/day</li> </ul>			
(average between the two tests) in the B' Horizon (41cm depth)				

Native soil in area of proposed dispersal field: Gravelly Sand

#### Constraints and design rationale:

- The disposal field will be located on the available area north of the house in the front yard. Soils are primarily sandy loam with a favourable structure and consistency category as per table II-22 and II-23 of the SPMV3. The disposal system shall consist of type 1 treatment using a hydraulic loading rate of 27L/day/m2. Septic tank pre-treatment using the existing 800IGtank (inspected by It Happens Wastewater Inc on April 29, 2025) and used as a primary settling tank followed by a 1400IG single compartment plastic tank with effluent filter at outlet.
- Linear Load: 250L/day/m

#### Record of Design Information and Calculations:

<u>Source:</u> Wastewater source is a typical residence with volume, strength and constituents expected to fall within domestic sewage parameters of the SSR and residential sewage parameters of SPM Table III-8 (e.g., no garburator, water softeners, unusual usage)

Daily Design Flow and Tank sizing

- Daily Design Flow (DDF): 4-bedroom, 372m<sup>2</sup> house (SPM Table 11-8/use Table 11-9 for seasonal cottage usage)
- Tank size = 2500 L/day x3 = 7500 Liters minimum. Therefore, recommended 1400IG volume tank capacity use the refurbished existing 800IG tank + 1400IG Canwest single compartment tank in sequence.

Hydraulic Loading Rate (HLR) Selected for Design:

• HLR for sandy loam=  $27L/m^2$ 

Minimum Area of Infiltrative Surface (AIS)

• AIS 2500/27 = 92.6m<sup>2</sup>

Linear Loading Rate and Calculation of Minimum System Length:

LLR for 'F' sandy loam on a 10-15% slope is 130L/d/m

Minimum 19.2 m dispersal length

Configuration of Dispersal System

5-0.9cm wide trenches, each 20.6 m in length. Trenches spaced 1.8m center-line to center-line.

0.9mx20.6=92.7m(>AIS)

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#### Construction Specifications and Procedures:

#### Gravity-fed trenches

- Minimum trench dimensions (x5) 20.6mx0.9m. Centre-feed.
- To prepare the site, remove small trees and vegetation over the dispersal area.
- Scarify the basal infiltrative surface (trench base) and scarify any smeared sidewalls.
- Place 30cm drain rock in trenches; level;
- Install the dispersal piping network; cover with 15cm drain rock and geotextile fabric
- Place cover soil at minimum 15cm depth to a maximum of 30cm
- Install two 100mm (4") PVC infiltrative surface observation ports
  - Place the bottom of the ports at a depth approximately 5 cm below the infiltrative surface.
  - Include drilled holes or saw cuts to perforate the bottom 15 to 20 cm of the port.
  - Install through the cutouts of the infiltrator chambers
- Ensure 90cm horizontal separation between trench sides

#### Aggregates:

- Bedding material under the tanks must be free of coarse fragments larger than 10 mm (3/8"). Backfill material for sides and top of tanks must be free of coarse fragments larger than 25mm (1"). Care must be taken to avoid large rock in the native soil from contacting the tanks. Installer may decide to use sorted native material (without large fragments as described above) or screened bedding sand, C33 or pea gravel.
- Bedding material under and over piping must be free of coarse fragments larger than 10 mm (3/8"). Screened bedding sand is highly recommended. Bedding material depth must be at least 25 mm under and 75 mm over piping and must in all cases be adequate to prevent contact of pipe with coarse fragments.

#### Pipe:

- 100mm (4") sewer connections must be CSA PVC drain line or better.
- Ensure minimum 2% fall (downward gradient) from sewer service to septic tank
- Install cleanouts every 20m for transport lines from sewer service to first tank and second tank to field.
- Transport line to dispersal area must be 2% grade.
- Laterals must be 76mm (3") sched 40 PVC. Ensure perforated holes are placed at 4 and 8 o'clock positions.
- Protect pipes from frost, either with adequate soil cover (below frost line approximately 90cm for transport and force main pipes) or with suitable insulation.

#### Septic tank:

- New 1400IG single compartment Canwest tank + existing 800IG tank
- Select the excavation elevation to ensure at least 2% fall from sewer system service to the tank and with consideration of riser heights (multiples of 15cm) to ensure the green lids are flush with the desired finished grade.
- Install an effluent filter (polylok PL250) at the outlet of second tank with handle extended to within 15cm (6") of access lid.
- Tanks to be installed on stable and level foundation subgrade
- Manufacturers backfill specifications must be followed.

#### Distribution box:

- Distribution box: 7-hole Tuf-Tite
- Ensure D-box invert is a minimum of 5cm higher than invert of perforated pipe.

#### Miscellaneous specs and installation procedures:

- Ensure 7.5m setback from house and from drinking water line
- Decommission existing dry wells
- Ensure the soil conditions in the dispersal area will promote vertical flow, so that soils will receive effluent without causing any significant horizontal flow or ponding.
  - Assess conditions. Adjust procedures and/or do not install in wet conditions.
  - Prevent excessive disturbance or compaction or smearing of the original soil in the dispersal area and downslope receiving areas; do not back trucks onto area, do not drive

any rubber-tired machinery over infiltrative surfaces or basal interfaces, minimize loads, do not smear soils with the back or bottom of the bucket.

- Scarify the infiltrative surface effectively, loosen the soil surface thoroughly but do not disturb the underlying soil excessively, scarify only to a shallow depth (approximately 10 cm).
- Ensure no subsequent settling or misalignment of tanks.
  - Provide consistent support of the tanks, ensure the depth of pea gravel or bedding material placed under the tanks is consistent by not over excavating and by making the excavation reasonably level before placing bedding. Then, for flat bottomed tanks, the pea gravel or bedding sand should be exceptionally level (±6 mm, ¼ inch or better).
  - Place water inside the tanks before backfill to secure them in place. This is always recommended but is especially critical if any groundwater is present in the excavation ... which could cause shifting or floatation of the tank before or during or after backfill.
  - Place backfill material consistently around tanks and with suitable care to avoid excessive side pressure that could cause the tank to shift.
  - Keep tires on tracks away from the tanks to avoid excessive side pressure.
- Ensure there is no risk of any tank movement, floating, or distortion that could be caused by excessive elevations of groundwater. If there is a risk of highwater table conditions, drain the tank backfill area to an elevation at or below 2/3 of tank height (lower for poly tanks), by using drain rock leading to the foundation perimeter drain, or by installing rock and a piping system that will discharge to other downslope point on the property. If this is not practical, then use anchoring methods approved by the tank manufacturer, and inspected and approved by the Planner. On this site, preliminary assessment indicates no such precautions are necessary, but the planner will attend the site during excavation to confirm.
- Ensure there is no subsequent settling, distortion or misalignment of the inlet and outlet piping for the septic tank, pump chamber, dbox AND provide reliable support for all piping systems.
  - Use suitable backfill material (unsaturated, granular material) under the piping to the full depth of the excavation or trench.
  - Use effective compaction techniques, such as a jumping jack, with soil lifts not exceeding 18 inches depth, or other methods approved by the Planner.
  - An alternative is to use rock fill under the piping to the full depth of the excavation.
- Protect all tanks and piping systems by using bedding material as described in the aggregate specifications section.
- Ensure that sewage or effluent will not leak from tanks or associated piping and that groundwater will not infiltrate tanks or any part of the system. Perform water tight testing of tanks and associated piping. Typically, this is done by installing suitable plugs in inlet piping and outlet piping, then filling tanks with water to 5 cm above tank lid within the risers and confirming leak free condition after 24 hours (as per SPM III- 6.4.3.2).
- Perform flushing and testing of the distribution box, in a manner that reduces the risk of clogging the distribution piping
- Establish appropriate vegetation cover of the dispersal field (grass) or ensure the owner agrees to this task.
- Ensure the dispersal field and tanks are protected during and after construction from traffic, animals, heavy loads, surface or sub surface flows of water. This may require fencing, rock

barriers or other suitable means to restrict access, and may require drainage systems such as swales and/or interceptor drains.

Contact the Planner, Natalya Melnychuk, before starting construction, to schedule a preconstruction meeting, and to make arrangements for construction oversight, final inspection and system commissioning.

#### Declaration:

These plans and specifications are consistent with standard practice with regard to the Sewerage System Regulation and the Sewerage System Standard Practice Manual of the B.C. Ministry of Health. I have conducted a site evaluation and exercised due diligence. I am a registered on-site practitioner authorized to plan wastewater systems herein.

















# It Happens

Home Owners Declaration Form It Happens Wastewater Incorporated Please fill out and email to info@ithappens.ca Blind Bay, B.C

Legal Owner Information as on title (Please provide one copy of the land title search)					
Name(s):					
Mailing Address: 2560-Eagle Bay Road Blind Ray BC VDE 1H1					
Phone Number: Home: / Cell:					
Site information: Parcel Identification Number (PID#): 723-563-840					
Site Address: Z560-Eagle Bay Read Blind Bay BC VDEIHI					
Lot Size (Acres): 5.5 Acres LAbout)					
Legal Description: Lot 1 section 30 Township 22 Range, 10 West of the 6th Meridian Kambons Division Yale District Plan KAP57413					
6th Meridian Kambons Division Yale District Plan KAP57413					
Water Source Information: Mac Arthur Reedman fisidential					
Water Source Information:Mac Arthur/Reedman hisi dential1. Source of Domestic Drinking Water (check one)CSRDRegional District - Water User.					
Municipal 🔽 private well 📄 private utility 📄 shared well 📄 lake 📄 stream					
2. Are there any other domestic drinking water sources in use or abandoned? If yes, describe:					
No					
3. Please describe all water source location(s): Main Water from CSRD Mac Arthor/					
Reedman point system into the house. Automatic sprin Klers around house					

4. Please identify the locations of neighbouring wells if known: <u>None</u>

#### Lot information

1. Are you aware of any easements/covenants/right-of-ways associated to this property?



- 2. Are there any private access agreements between you and your neighbours? An
- 3. Have you ever filled or know of any fill (soil, etc) placed on this property? Please specify type, depth and location.



4. Are you aware of any drainage systems? (not around the house) Please specify type, depth and location.

No

5. Are you aware of any buried electrical, water, or gas lines? Please specify type, depth and location.



workshop, shed, parking area, driveway, landscaping. Please provide details.

No

#### **Building Information**

1. Is this system needed for a new building or an existing building?

New	Building
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Existing B	uilding
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2. Is there to be a secondary building or suit to be connected to this septic system?

No
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No

3. Is there to be any non-residential use, i.e., small business, employees, hobby wine/beer making, dog kennel, horse blanket-washing etc.?

~	-	_	
Y	e	S	

Yes

6

Yes

If yes, type of use:\_\_\_\_

4. Does this location experience long or frequent power outages?

No	
No	

5. Is this property used full time, part time, or seasonally?

Full Time 🔀	Part time	Seasonally	
If seasonally, wi	hich season?		
How many peop	le do you expect to	be regularly using the se	ptic system?

6, 10 in the summer

7. Approximately how many visitors to you expect to have and how often do you expect them? How long do you expect them to stay?

Suly-Ang 10 people 8. Main residence liveable space (square meters) including finished basement. Does not include garage or deck.

4000 ST

9. Number of bedrooms in the main residence. \_

10. Second building or suit liveable space (square meters). Does not include garage or deck.

How many bedrooms in the suit/second bedroom? How many people living there?

Yes

No

11. Do the building(s) have perimeter drainage? Describe.

aping around the house

12. Is there a garburator installed or planned for?

13. Is there a water softener or iron filter installed or planned? Yes

### Necessary Documents

Please provide us with the following documents in either hard or electronic versions. They are necessary to design and file the system. If you need assistance to obtain them, please contact us as soon as possible.

- Land title
  - 2. Survey plan (if available)
  - 3. Building plan (if new building or addition)
- 4. Entire contents of the file held by the Health Authority (if site has or had a septic system)

#### **Declaration Statement**

I/We, the undersigned declare that I/we are legal owners of the above mentioned property and the information given above is true and accurate for the purpose of planning, designing, constructing and maintaining a sewerage system for said property. and that changes alterations or amendment to this above information (before construction of the sewerage system) will be provided to Rodric Van Woerkom, the Authorized Person as defined in the B.C. Health Act, Sewerage System Regulation 324/2004, in writing prior to any installation of a sewerage system.

Name of Owner(s)	Date of signed declaration: May 14 12025
Print name	Print name
Signature	Signature