John Jackson Planner, Inc.
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Tel: (705) 746-5667 E-Mail: JJPlan@Vianet.ca

PLANNING REPORT

IN SUPPORT OF A REZONING APPLICATION

FOR DOUBLE ISLAND – A472

PCL 7096 N/S

ROLL #490514001107100

P.I.N. 522430704

OWNERS: David Ballentine and Nancy Regan

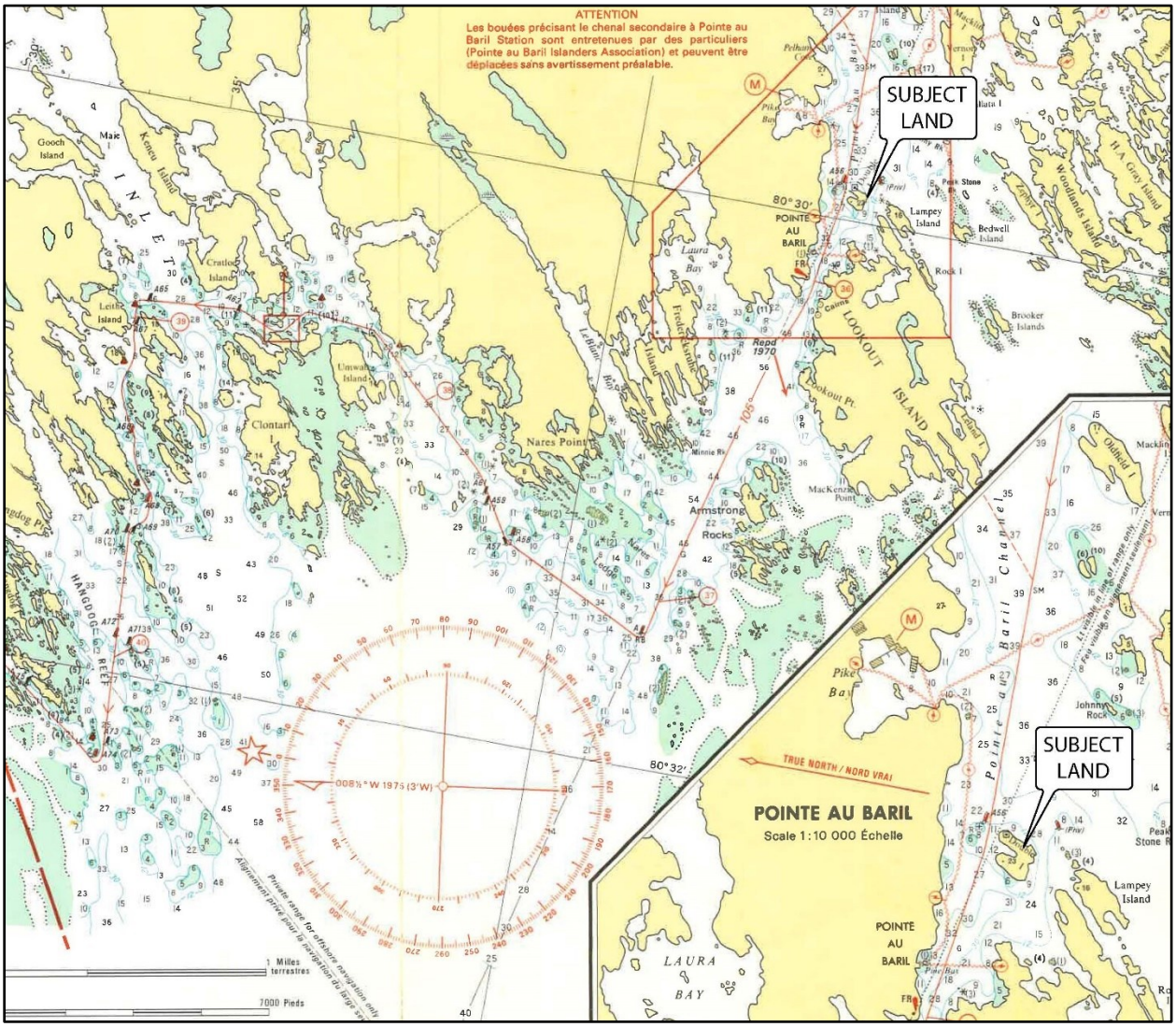
February 7, 2025

Prepared With The Assistance of John Jackson Planner Inc.

BACKGROUND/PURPOSE

The owners of Double Island A472 in Pointe au Baril wish to redevelop the island with a dwelling for use as a summer cottage.

Double Island is a prominent island located on the main channel near the point at Pointe au Baril.



The island has been the historic site of a local fishery depot, a post office and store. Many of the local islanders frequently attended at the island for services.

At the time of the incorporation of the island as part of The Archipelago, it was known for its commercial fishery use.

As commercial fishing began to decline in the 1980's and 1990's the Double Island depot became abandoned.

ISLAND DESCRIPTION

Double Island gets its name from its ‘U’ shape but to a certain extent, this creates a physical constraint for current servicing criteria.

The Island is typical of many Pointe au Baril islands with extensive barren rock and a thin veneer of sandy/silty soils. This geography makes the installation of a traditional septic system quite challenging.

Historically, the island and its variety of uses would have been serviced by privies.

The island is 1.17 acres (0.47 ha), and it has a small structure on the property best described as a storage shed. MPAC describes the Island as vacant.

The original patent is attached to this report.

ATTEMPTS TO REDEVELOP DOUBLE ISLAND

The owners have attempted to redevelop Double Island for a seasonal residence using a Class V wastewater system (holding tank) to service a new dwelling.

The Township of The Archipelago is the approval authority for wastewater systems within its jurisdiction. It has interpreted the Ontario Building Code to prohibit the use of a holding tank on Double Island thereby denying a building permit for a dwelling (see letter Nov. 24, 2020).

THE BUILDING CODE PROVISIONS – HOLDING TANKS

There are limited circumstances where a Class 5 system (holding tank) is available.

1. The acceptable installation criteria include:

    a) Where the proposed use of the sewage system is for a temporary operation, excluding a seasonal recreational use, not exceeding 12 months in duration;

        The holding tank is a buttress of Archipelago service culture, particularly in the north part of the Municipality where barren islands were often patented with areas less than 1/3 of an acre. With new wastewater treatment technologies, many holding tanks could now be replaced with tertiary septic systems, but the continued use of the holding tank will always be part of The Archipelago landscape, particularly in the north.

    b) To remedy the unsafe condition by installing a Class 4 sewage system is impracticable.

        If there is a thought that a sewage system is unsafe because the ongoing use of its historical service on the property and a Class 4 cannot be practically installed, this criterion may have some relevance.

    c) To upgrade a sewage system servicing an existing building, where upgrading through the use of a Class 4 sewage system is not possible due to lot size, site slope or clearance limitations.

        There has obviously been a century of use on Double Island where wastewater was generated so that the historical use must be recognized should the placement of a Class 4 system not be available, the holding tank should be acceptable.

    d) Pending municipal services.

        Never likely to happen.

2. “Where a Class 5 sewage system is installed, a written agreement for the disposal of sanitary sewage from the sewage system shall be entered into with a hauled sewage operator.

        There are at least 3 sewage haulage operators in The Archipelago that service holding tank pump outs as well as septic pump outs. This requirement is not a problem.

The above criteria are not believed to be a good “fit” in The Archipelago where the holding tank is a “way of life” to those that use them. There seem to be a general sense

that abusing holding tanks is a concern. This concern is unlikely to apply to anywhere but The Archipelago whose residence are fundamentally environmentally conscious in contrast to other jurisdictions.

Guideline F-9 – Holding Tanks (July, 2021)

The province has issued a Guideline for the use of Holding Tanks identified as F-9.

It should be understood that “guidelines” are not legislation. Therefore, there are available interpretations to these types of instruments. Generally, the ultimate decision for the use of a holding tank is with the approval authority who is able to determine the plausibility or the appropriateness of a holding tank application.

F-9 Guidelines – Synopsis (April, 1994, updated 2021)

The guideline has been in existence for 30 years.

> “The primary purpose of this Guideline is to protect human health and the environment by restricting the use of holding tanks in sewage systems.” Systems using holding tanks are expensive to operate and do not constitute a sufficient reliable system for dealing with new sewage on an ongoing basis.
>
> The use of holding tanks may be allowed in certain circumstances, provided that the Municipality involved is willing to accept responsibility for the holding tank contents.
>
> The general synopsis is intended to apply province wide and for most communities, services are available either publicly or privately for wastewater disposal without relying on holding tanks. For year-round residence that rely on more typical effluent flows, one can understand how a holding tank is not perceived as sustainable.
>
> In The Archipelago, the use of holding tanks is not infrequent and they can be sustainable for a number of reasons.
>
> The typical islander is a true seasonal resident where occupations are restricted to part time and generation of effluent is greatly reduced because of the shortened season and the heightened awareness on water conservation and environmental protection.
>
> As indicated above, the holding tank system is common in The Archipelago where there is longstanding infrastructure in place to service these systems.
>
> The south part of The Archipelago has generally seen island owners replace holding tank uses to more technologically advanced tertiary systems wherever

possible. The north with a different geography continues to have several hundred holding tanks in operation.

The writer of this report has an experience with holding tanks in The Archipelago where his family owned an island from 1970 to 2019. For the first 30 years, the island was serviced by a 9000 litre holding tank that was pumped once a year for this period without a concern. The parents were public school teachers who spent the months of July and August on the island but were able to limit wastewater below the holding tank capacity such that only one pump out was required at the end of each season.

F-9 Guidelines – Prohibitions

The Guideline prescribes;

"Directors shall not approve applications for Class 5 sewage systems where the intended use is:

a) For any <u>new</u> commercial, industrial, or residential installation;

b) To permit the expansion of existing buildings or structures already serviced by a Class 5 sewage system;

c) To permit a change in the use of existing buildings or structures where the change result in the existing Class 4 or Class 6 sewage systems being rendered in adequate; or

d) For the development of undeveloped lots within a plan of subdivision registered before April 16, 1974, where the individual lots are of sufficient size to permit the installation of a Class 4 system."

An examination of the current property and the related facts comes to a clear conclusion that none of these exclusionary criteria are applicable.

i. There is no new use;

ii. There is no expansion of a Class 5 system;

iii. There is no expansion of previous uses; and

iv. This is not an undeveloped lot in a subdivision.

F-9 Guideline – Exceptions

The Guideline provides exceptions to the prohibitions.

> "Notwithstanding Section 2.0, Directors may permit the use of Class 5 sewage systems where a written agreement has been established with a hauler in the following circumstances:
>
> a) The proposed land use is for a temporary operation; (excluding cottages) not exceeding one year;
>
> b) As an interim measure for a parcel of land until municipal services are available;
>
> c) Where the lot is in a registered plan of subdivision, but the lot is of insufficient size to permit the construction of a Class 4 sewage system, and the Municipality undertakes to ensure the continued operation of an approved Class 7 sewage system;
>
> d) To permit the expansion of an existing family residence which will continue as such and is already served by a Class 5 system;
>
> e) To solve an existing pollution problem where the correction of the problem by the installation of a Class 4 or Class 6 sewage system is not possible due to lot size or dimension limitations;
>
> f) To upgrade the standard of a substandard sewage disposal system on an existing lot, where upgrading through the use of a Class 4 or Class 6 sewage system is not possible due to lot size or dimension limitations.

The proposed use of a holding tank does not fit well into any of the above exceptions. However, it does not appear to be identified as one of the "prohibitions" in the Guideline.

Financial Assurances

Most holding tank systems are required to have contracts between the land owner and the haulage operator for proper disposal.

It can be noted that the Township of The Archipelago contributes to the wastewater plant in the Parry Sound Industrial Park to be eligible to have hauled waste treated at this facility.

Attempts to Achieve a Building Permit

1. Class 5 Holding Tank proposed.

   On November 24, 2020, the Building Department refused a permit on the basis of a Class 5 Holding Tank system (see letters).

   On October 8, 2020, the owner's agent was denied the request for a leaching bed permit (Class 2).

   On November 24, 2020, the Building Department refused a permit application for a Class 5 (holding tank) system.

2. Building Code Commission – 2022 (B.C.C.)

   The owners applied for relief for a permit for a Class 5 system to the Ontario Building Commission.

   The B.C.C. refused to overrule the Municipality's decision to deny the Class 5 system on the basis that is would not comply with sections 8.8.1.1 and 8.8.2.6.1 of the Building Code.

   Much of the B.C.C ruling was fundamentally based upon the general prohibition of Class 5 holding tank systems.

   However, the B.C.C reasons seem to imply that a more robust analytical presentation may have had a different result.

3. Building Code Commission – 2024

   The owners applied for a Class 4 septic system in 2024 after an engineer was retained to design a system suitable for servicing a 225m² seasonal dwelling on Double Island.

   This permit continued to be denied by the Municipality's building department primarily on the basis of the absence of any substantial natural soil cover on the island.

   The engineer's report provided a thorough analysis to demonstrate that a system could be constructed on the island.

   Despite the building departments opposition to the application, the B.C.C ruled in favour of the application and allowed for the permit.

PLANNING ANALYSIS

Objective

The applicant is hoping to re-visit the ability to service the island with a holding tank on the following basis:

1. The installation of the approved Class 4 system requires significant site alteration including blasting that is contrary to the general goals and objectives of the Township.

2. There are significant costs and disturbances to install the Class 4 filter bed system on the island.

3. The use of holding tanks is commonplace in The Archipelago.

4. There are a number of longstanding hauling businesses in The Archipelago that are able to maintain the service together with the Municipality who contracts to dispose of hauled waste at a local facility.

5. The prohibition of Class 5 septic systems is provided in section 8 of the Building Code with a number of prohibitions and exceptions, many of which are not precisely related to the circumstances found on Double Island.

6. There are a number of B.C.C rulings on Class 5 systems that are both in support of the uses of holding tanks and some against. While all contexts are different, the applications of the regulations and guidelines demonstrate how there are varying determinations both for and against.

7. The holding tank can be said to be one of the most environmental guarantees to protect the environment since all waste is pumped and hauled away. Persons will often tamper with holding tanks that may result in the release of pollutants. In my experience, this has seldom been the case (if ever). The holding tank is a standard service approach for many islands.

8. The history of the use of Double Island has been intense and varied. Any new construction will meet current standards such that there will be no impairment of the natural environment.

9. The objectives of the official plan recognize the unique qualities of The Archipelago:

    "4.7 Providing a limited, but efficient system of services designed and implemented for the distinctive, water based needs of The Archipelago Community"

10. The official plan also recognizes the current infrastructure status in The Township

"5.10 Public Services

All water supplies and sewage disposal systems within The Archipelago are presently privately owned. Adequate facilities are provided by the private sector to install and maintain these private systems."

11. The Building Department at The Archipelago continues to be rigid when interpreting the application of rules governing Class 5 holding tank septic systems. The use of holding tanks for new construction is to be prohibited. For its purposes, the law is "black and white."

CONCLUSION

It is believed that there is more discretion for the use of Class 5 holding tanks for certain circumstances.

Many Archipelago islands, including Double Island would fall into this category.

In The Archipelago, a septic system is defined as a "structure." Therefore, the impasse between the planning and building provision may be aligned through a site-specific zoning By-Law amendment that recognizes a Class 5 system for Double Island for the proposed cottage development.

Because Double Island has been determined to be suitable for a Class 4 system albeit at great impact to the natural and physical environments and is hopeful that the position on the use of a holding tank in this instance, can be authorized as being the most appropriate system for the long term interests of the Municipality.

Respectfully,

John Jackson

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875 THE LAND TITLE'S ACT.

In the matter of Lot known as Double Island in the Township of Harrison and District of Parry Sound and marked No. 1 on plan made by J. G. Sing, D. & P. L. S., dated May 1893.

I, John James Anderson of the City of Toronto in the County of York, Commercial Traveller

make oath and say.

1.—I am the Patentee of the above named land.

2.—That the said Land is not worth more than $ 500.00 (Five hundred dollars)

Sworn before me at the City of Toronto in the County of York this 21st day of November A. D., 1893

J. J. Anderson

Henry Brock
A Commissioner

Land Titles Act

In re.

Double Island

Township of Harrison

affidavit of Value

Cassels Cassels & Co

REGISTRY OFFICE
District of Parry Sound

I certify that there have been no registrations made in the books of this Office affecting "Double" Island in the Georgian Bay of Lake Huron, in the Township of Harrison and in the District of Parry Sound except a Notice of Patent dated the third day of August A.D. 1893. Crown to John James Anderson for One acre and Seventeen hundredths of an acre. Crown Lands Sale and Subject to "the Land Titles Act". Excepting nevertheless any instruments that may be recorded in the General Registry books of this Office affecting lands, and wherein the lands affected thereby are not mentioned or identified.

Registry Office
Parry Sound
22 Oct A.D. 1893)

Thos Kennedy
Registrar

Fees 50 c. Paid
Thos Kennedy

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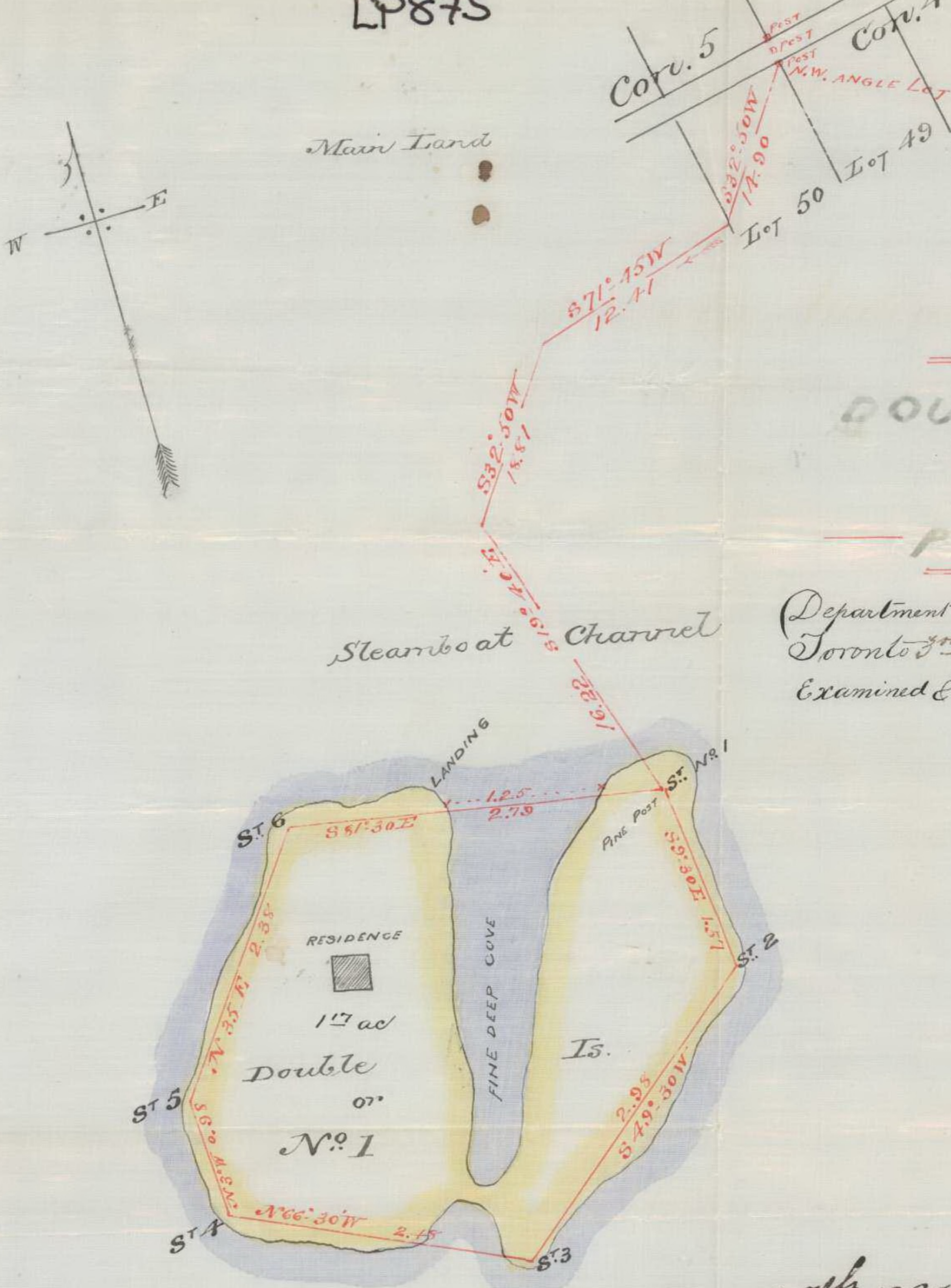

Plan of Double Island at Point Aux Baril

Department of Crown Lands
Toronto 3rd Augt 1893
Examined & Certified a true Copy
Aubrey White
Assistant Commissioner

May 25th 1893

J. G. Sing
O. L. Surr

Scale 1 Ch. to 1 In.

Exd June 16/93
813K

Compd WR

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PROVINCE OF ONTARIO.

A6824 A Kirkpatrick

Victoria, by the Grace of God, of the United Kingdom of Great Britain and Ireland, QUEEN, Defender of the Faith, &c., &c., &c.

To all to whom these Presents shall come—GREETING:

Whereas John James Anderson of the City of Toronto in the County of York Commercial Traveller

has contracted and agreed for the absolute purchase of the Lands and Tenements hereinafter mentioned and described at and for the price or sum of Five Dollars of lawful money of Canada and of which Lands we are seized in right of our Crown.

Now Know Ye that in consideration of the said sum of Five Dollars well and truly paid to Our use at or before the sealing of these Our Letters Patent, We have granted, and by these presents do grant unto the said John James Anderson in fee simple: All that Parcel or Tract of Land, situate, lying and being in the Township of Harrison in the ~~County~~ District of Parry Sound in the Province of Ontario, containing by admeasurement one acre and seventeen hundredths of an acre be the same more or less, which said Parcel or Tract of Land may be otherwise known as follows, that is to say: being composed of "Double" Island in the Georgian Bay of Lake Huron in the said Township of Harrison as shown on plan of survey by J. G. Sing, Ontario Land Surveyor, dated 25th May 1893, of record in the Department of Crown Lands, a copy of which plan is attached to these Letters Patent. Reserving unto Us Our Heirs and Successors all pine trees standing or being on the land hereby granted

or No. 1.

saving, excepting and reserving, nevertheless, unto Us, our Heirs and Successors the free use, passage and enjoyment of, in, over and upon all navigable waters which shall or may hereafter be found on or under, or be flowing through or upon any part of the said Parcel or Tract of Land hereby granted as aforesaid, and reserving also right of access to the shores of all rivers, streams and lakes for all vessels, boats and persons, together with the right to use so much of the banks thereof, not exceeding one chain in depth from the water's edge, as may be necessary for fishery purposes.

GIVEN under the Great Seal of Our Province of Ontario: **Witness**, the Honourable GEORGE AIREY KIRKPATRICK, Member of Our Privy Council for Canada, and Lieutenant-Governor of Our Province of Ontario.

At Toronto, this Third day of August, in the year of Our Lord, one thousand eight hundred and ninety-three, and in the fifty-seventh year of our Reign.

By Command of the Lieutenant-Governor in Council.

J. M. J. D. G. G.

Ref. No. 47354
Sale No. 45317 } C.L.S.

Local Master Parry Sound

[signature]

Secretary.

Aubrey White

assistant *Commissioner of Crown Lands.*

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THIS LAND HAS BEEN REGISTERED UNDER THE LAND TITLES ACT FOR PARRY SOUND

CROWN SALE.

GRANT

TO

John James Anderson

1 17/100 Acres

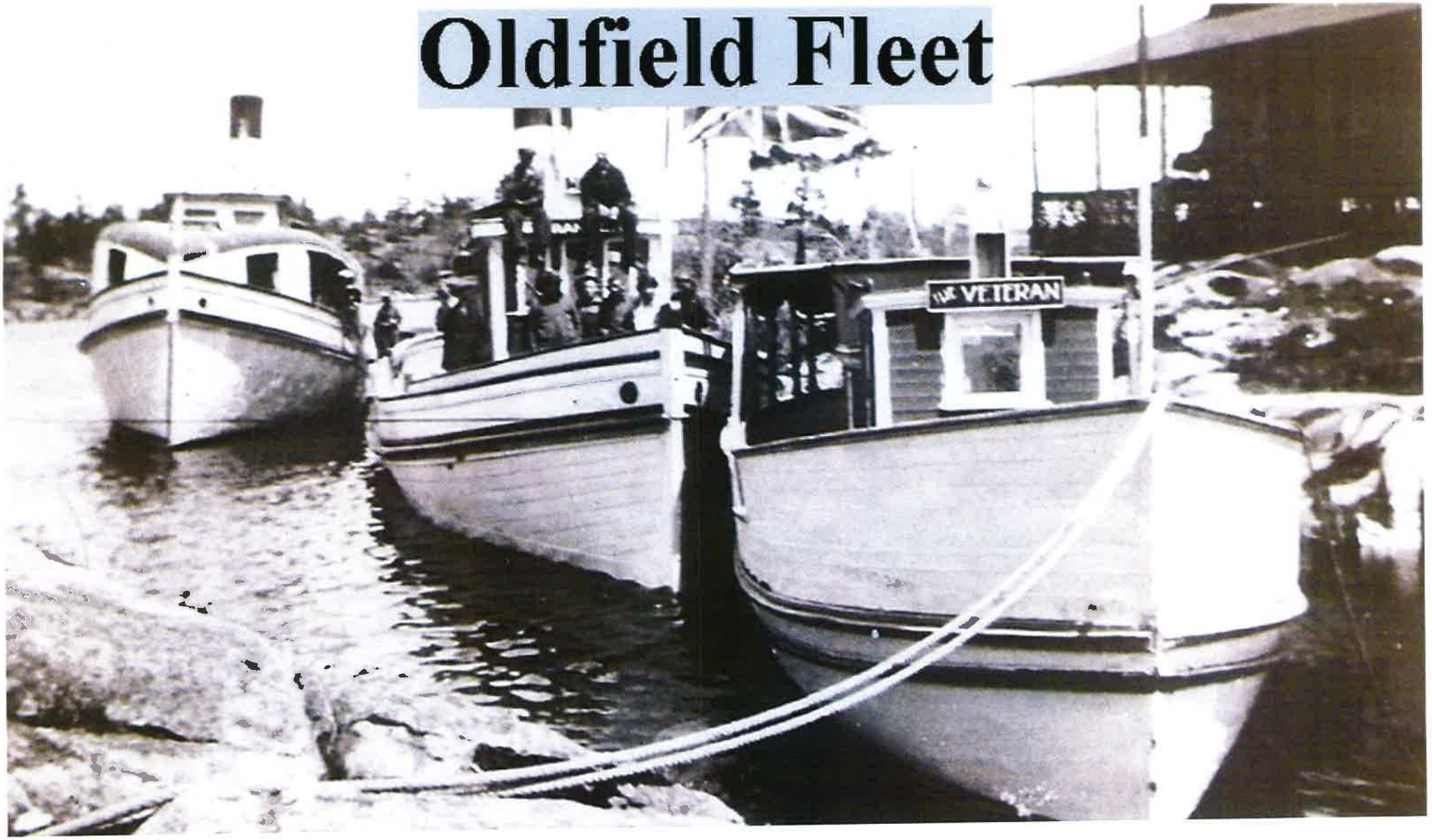
Township of Harrison
District
~~County~~ of Parry Sound

Recorded 25th August 1893.

Liber, 132 Folio, 63

John F. Fisher
Deputy Provincial Registrar.

Oldfield Fleet




DOUBLE ISLAND, POINTE-AJ-BARIL, ONT.

visit." The 1890 log of the *Olivette* tells of a 15-boat local fleet and the tug *G.P. McIntosh* calling in at Pointe au Baril to load fish for Collingwood.

An estimate made in the same year puts 436 fishermen in Georgian Bay. The writer, James Cleland Hamilton, described the stations at the Minks and the Bustards in considerable detail. At the former he encountered a party in progress with a fiddler providing music for the lively dances of the day, "cotillions, quadrilles and Sir Roger (de Coverley)." He was told there that a complete outfit of boat, sails, gear, and three gangs of 12 nets, had a value of $1,125. The usual season's take was 18 to 20 tons, worth $70 to $80 each. Each proprietor had his own colour of buoy and nets were left out two or three nights, or more in rough weather. There was no rent or tax, but there was an annual license fee and there were Dominion regulations as to time and mode of fishing. Even then Hamilton spoke of conservation measures needed and complained of the fouling of the rivers and Bay with sawdust and refuse by the lumbermen.

Early efforts to monitor the industry were a federal matter. John Macfie, Parry Sound historian, tells of one employee, F.G.M. Frazer from Victoria Harbour, who enjoyed his warden's job so much he covered twice as much of the bay shore as he had been assigned. "When he encountered a small fleet of

sailing skiffs (1880s) fishing illegally south of Pointe au Baril, he tethered them to his stern and led them single file to Parry Sound and court." Jack Perks said: "A Mr. Laughington of Parry Sound was the game and fisheries agent for the Ontario Department of Lands and Forests. In 1907 and 1908, he would come up with his large pointer (a lumberman's punt) which was powered by a high pressure steam engine with an upright boiler, to try to catch the illegal fishermen around Pointe au Baril. He called the boat, which ran about 6 m.p.h., *Pearl*." Neil MacNaughtan of Parry Sound told us he was the first full time game warden appointed and that he also policed commercial fishing. Until the Department gave him a 3.3 h.p. motor, he was expected to pursue offenders in a rowboat and "suffered many a blister ... even with the motor I was still six jumps behind everybody."

The life of a fisherman was very hard physically and the rewards in those days relatively small. Losses of boats and gear in fall storms and injuries to limbs were major disasters. But the industry continued at Pointe au Baril for many years yet, carried on by the Oldfields, who arrived close on the heels of the McIntoshes to become the first settlers and founders of the village of the Pointe.

W.H. Oldfield House at Double Island, [illegible] 1962 Louise Warrington (private [illegible]

The Parry Sound Census of 1871 lists both Samuel and Elizabeth as aged 26, so it was a very young courageous couple, burdened with two small children and another on the way, who had set out from England to seek their fortune in Canada. In 1873, Samuel was one of the first four councillors chosen in the first municipal election held in the Orange Hall at McKellar Village. Perhaps a combination of the difficulties of homesteading and Mrs. Oldfield's fears, prompted the family move to Parry Sound. It is known that they were living there by 1885 and were engaged in a variety of pursuits, such as operating a general store on property next to the Court House. Samuel was the agent in Parry Sound for the Sarnia Agricultural Implement Manufacturing Company — probably not a very lucrative business, given the marginal farming land in the district.

Meanwhile, freight and passenger vessels had begun to provide a more or less regular service up and down the eastern shore of Georgian Bay and better navigational aids were needed. Lighthouses had been build as early as 1870 at Gereaux Island (Byng Inlet) and Red Rock, but the primitive 'baril' on a pole was not replaced until 1889. Samuel applied for the job of first lighthouse keeper, and remained in that capacity until 1907. The whole family moved north with the exception of Henrietta who had just been married to Parry Sound blacksmith and harness-maker, Richard Johnson. A small store was opened and Oldfield became the first postmaster in 1892, handling the mail which arrived three times weekly by steamer.

The oldest son, William Henry, known to us as Captain Oldfield, married to Henrietta Vail, soon took over his father's store and established a fishing station on Double Island which lasted for about 50 years. His two younger sons, Frank and Freeman, worked with their father there, while his oldest son, William S., had a fishing station of his own near the range light. W.H. and Henrietta also had three daughters, Edythe, Stella and Irene, and the family owned in addition to Double Island, a substantial home in Thornbury on southern Georgian Bay. As well as carrying on some commercial fishing in that area, the family ran the large house there as a resort at one time. Daughter Edythe married Harold Dickinson of Thornbury and the couple ran the store on Double Island before leaving to settle in Akron, O. Their son Jack is now a summer cottager at Pointe au Baril, as is his cousin Verona Melvin, daughter of Stella Oldfield Fulford.

The Oldfield tugs replaced the earlier Meaford skiffs. Over the years the family owned a series of boats: *Archie W.*, *Jolly Four*, *Veteran*, *Frank L.* (I and II), *W.S.*, and the *Gary M.* (The latter was forced to send out an SOS early in April 1955 — "The Tug (*Gary M.*) is caught in the ice, 10 miles from Pointe au

Pointe au Baril lighthouse, July 1898 (McIntosh Island album)

W.H. Oldfield Store at Double Island (courtesy E. Kennedy)

W.H. Oldfield's Double Island Fishing Station - Before loss of cottage on left by

L. to R. Freeman Oldfield, W.H. Oldfield, W.S. Oldfield, Frank Oldfield - 1920 (courtesy J. Dickinson)

Mrs. W.H. Oldfield with children L. to R. Standing - Frank L., Freeman E.,

9 JAMES STREET • PARRY SOUND, ONTARIO • P2A 1T4
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www.thearchipelago.on.ca

Reply Attention of: Rob Farrow
Telephone Extension: 308
Internet Address: rfarrow@thearchipelago.on.ca

October 8, 2020

Tom Todd
North Shore Barge & Marine Ltd.
P.O. Box 151
Parry Sound, ON P2A 2X3

RE: CLASS 2 SEWAGE SYSTEM – A472 ISLAND

Dear Mr. Todd:

The Township of The Archipelago's building department is returning your building permit application to construct a Class 2 sewage system at A472 Island because of non-compliance with the Ontario Building Code (OBC).

The reason for refusal is that the proposed location of the Class 2 sewage system does not have adequate in-situ soil as defined by the OBC, Part 8, Section 8.1.1.2(1) and is mostly bedrock as determined during a site visit to the property on October 5, 2020. Also, the proposed location of the Class 2 sewage system does not meet the minimum clearance of 15 metres to the lake in all directions as required by OBC 8.2.1.5(1). The site evaluation conducted in accordance with OBC 8.2.1.4 also showed that there was exposed sloping bedrock and boulders with no or little in-situ soil in all directions.

For these reasons, a building permit cannot be issued for a Class 2 sewage system at this location. Enclosed, please find the building permit application submitted as well as your cheque for the permit fee of $175.00.

Sincerely,

RF

Rob Farrow
Chief Building Official

Encl.

9 JAMES STREET, PARRY SOUND, ONTARIO P2A 1T4
(705) 746-4243 FAX (705) 746-7301
www.thearchipelago.on.ca

Reply Attention of: Rob Farrow
Telephone Extension: 308
Internet Address: rfarrow@thearchipelago.on.ca

November 24, 2020

Tom Todd
North Shore Barge & Marine Ltd.
P.O. Box 151
Parry Sound, ON P2A 2X3

RE: CLASS 5 SEWAGE SYSTEM – A472 ISLAND

Dear Mr. Todd:

This letter is in response to a building permit application received for a Class 5 sewage system at A472 Island (PCL 7096), also known as Double Island, on November 16th, 2020. Pursuant to the Ontario Building Code Act 8(2.2) and 8(2.3), I have determined that there is not sufficiency of compliance with Part 8 of the Ontario Building Code (OBC), and therefore a building permit will not be issued.

The reasons for refusal are as follows:

1) Section 8.8 Class 5 sewage systems states in Sentence 8.8.1.1(1): Except as provided in Article 8.8.1.2, a Class 5 sewage system shall not be installed.

2) Sentence 8.8.1.2(1) Acceptable Installation further states: a Class 5 sewage system may be installed in the following circumstances; further, Clause 8.8.1.2(1)(a) states: where the proposed use of the sewage system is for temporary operation, excluding seasonal recreational use, not exceeding 12 months in duration. *The Class 5 sewage system applied for is to service a proposed 225 square meter seasonal recreational cottage that is water access on Georgian Bay.*

...../2

3) Clause 8.8.1.2(1)(b) states: to remedy an unsafe sewage system where the remediation of the unsafe condition by the installation of a Class 4 sewage system is impracticable. *There is currently no unsafe condition as there is no existing sewage system or seasonal recreational cottage on the island.*

4) Clause 8.8.1.2(1)(c) states: to upgrade a sewage system serving an existing building, where upgrading through the use of a Class 4 sewage system is not possible due to lot size, site slope or clearance limitations. *There is not an existing building on the island and assessment records from 1979 indicate that A472 Island was vacant at that time and remains vacant to this day.*

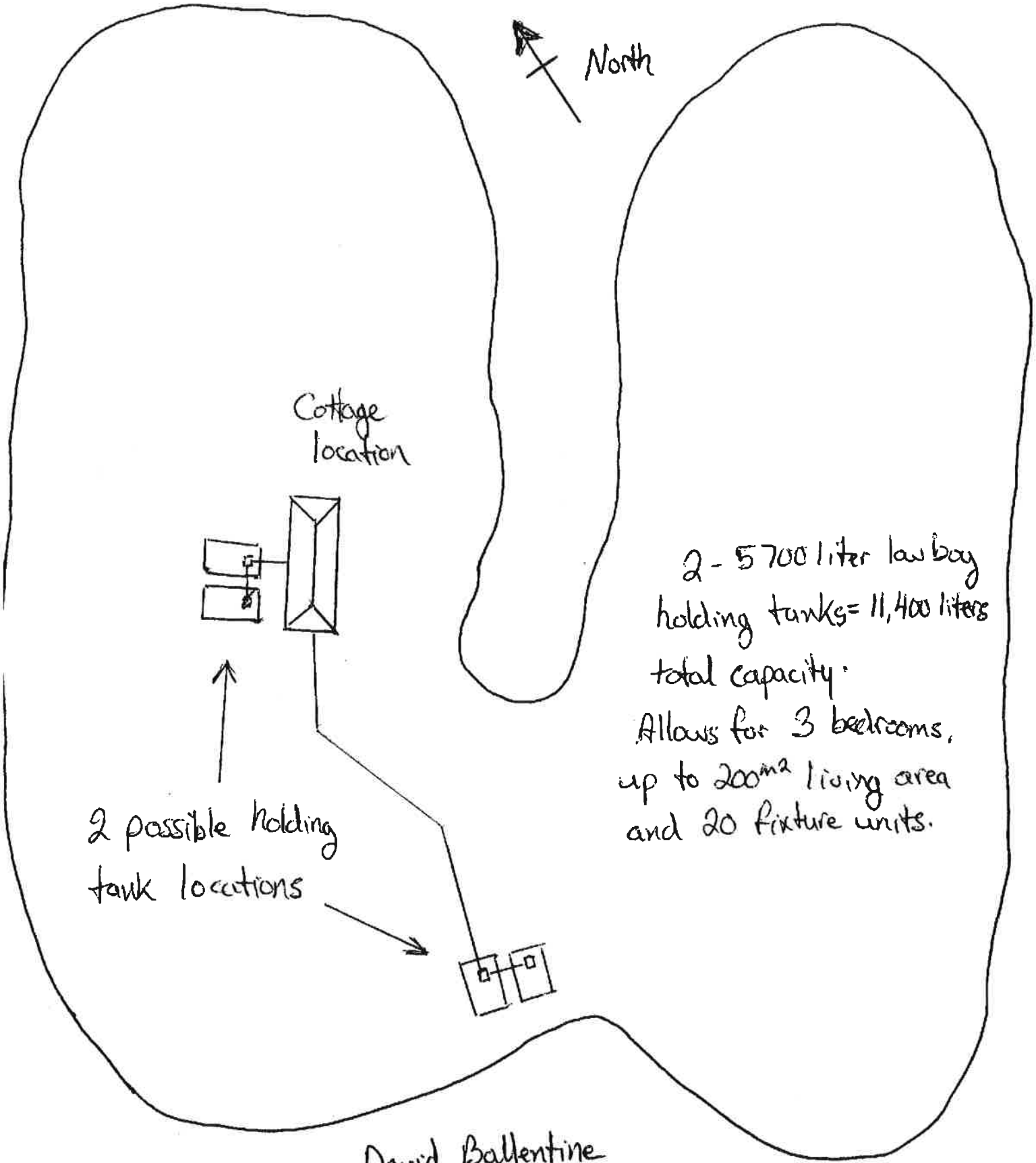
5) Clause 8.8.1.2(d) states: as an interim measure for a lot or parcel of land until municipal sewers are available. *Municipal sewer infrastructure is considered unfeasible to service a water access property on Georgian Bay.*

For the reasons stated, a building permit for a Class 5 sewage system cannot be issued at A472 Island. Enclosed, please find the building permit application submitted as well as the cheque for the building permit fee of $500.00.

Sincerely,

Rob Farrow, C.B.C.O.
Chief Building Official

Encl.



David Ballentine
Island A472
1.17 Acres

Ontario

Ministry of Municipal Affairs and Housing

BCC Ruling No. 16-15-1443

Email this page

Ontario

Ruling No.: 16-15-1443
Application No.: S 2016-04

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act, S.O. 1992*, c. 23, as amended.

AND IN THE MATTER OF Sentence 8.8.1.1.(1), 8.2.2.4.(2), 8.8.2.2.(1), Clause 8.8.1.2.(1)(c) and Table 11.5.1.1.C of Division B of Regulation 332/12, as amended, (the "Building Code").

AND IN THE MATTER OF an application by John Casson, for the resolution of a dispute with Andy Harrison, Chief Building Official, to determine whether the proposal to replace an existing Class 4 sewage system, which serves an existing 3 bedroom, 200 m² cottage, with a new Class 5 sewage system provides sufficiency of compliance with Sentence 8.8.1.1.(1), 8.2.2.4.(2), 8.8.2.2.(1), Clause 8.8.1.2.(1)(c) and Table 11.5.1.1.C when considering Part 11 of Division B of the Building Code at 156 Onderdonk Lane Ameliasburgh, Ontario.

APPLICANT

John Casson
Owner
Mississauga, Ontario

RESPONDENT

Andy Harrison
Chief Building Official
County of Prince Edward, Ontario

PANEL

Judy Beauchamp, Chair-Designate

PLACE

City of Toronto, Ontario

DATE OF HEARING

April 11, 2016

DATE OF RULING

April 11, 2016

APPEARANCES

John Casson
Owner
Mississauga, Ontario
Applicant

Andy Harrison
Chief Building Official
County of Prince Edward, Ontario
Respondent

RULING

1. Particulars of Dispute

The Applicant has applied for a permit to install a Class 5 Sewage System at 156 Onderdonk Lane, Ameliasburgh, Ontario.

The subject building is an existing 3 bedroom, 200 m^2 cottage served by a Class 4 sewage system that was originally constructed in 1961.

The construction in dispute involves the proposal to replace an existing Class 4 sewage system, with a new Class 5 sewage system.

The Building Code prohibits the installation of a Class 5 sewage systems except under the circumstances that are specified in Article 8.8.1.2. of the Building Code. Part 8 of the Building Code addresses the construction of new sewage systems. Part 11 of the Building Code applies to the design and construction of buildings that have been in existence for at least five years. The term "building" is a defined term in the Building Code and it includes sewage systems. Part 11 of the Code addresses existing sewage systems that are subject to replacement, material alteration or repair. Part 11 also provides compliance

alternatives for requirements in Part 8 of the Building Code where a Chief Building Official is satisfied that compliance with the requirement is impracticable because of structural or construction difficulties or it is detrimental to the preservation of a heritage building.

The dispute for the Commission to determine is whether the proposal to replace an existing Class 4 sewage system with a new Class 5 sewage system provides sufficiency of compliance with the Building Code.

2. Provisions of the Building Code in Dispute

8.8.1.1. Prohibited Installation

1. **(1)** Except as provided in Article 8.8.1.2., a Class 5 *sewage system* shall not be installed.

8.2.2.4. Holding Tanks

1. **(1)** All *holding tanks* shall be of such design and construction as will allow the complete removal of solid matter that can be expected to settle in the *holding tank* through an apparatus or device suitable for allowing the contents of the *holding tank* to be removed from the *holding tank*.
2. **(2)** A *holding tank* shall have a *working capacity* of not less than 9 000 L.

8.8.2.2. Sizing of Holding Tanks

1. **(1)** All *holding tanks* used in residential dwellings shall have a minimum 7 day holding capacity based on the total daily design *sanitary sewage* flow.

8.8.1.2. Acceptable Installation

1. **(1)** A Class 5 *sewage system* may be installed in the following circumstances:
    1. (a) where the proposed use of the *sewage system* is for a temporary operation, excluding seasonal recreational use, not exceeding 12 months in duration,
    2. (b) to remedy an unsafe *sewage system* where the remediation of the unsafe condition by the installation of a Class 4 *sewage system* is impracticable,
    3. (c) to upgrade a *sewage system* serving an existing *building*, where upgrading through the use of a Class 4 *sewage system* is not possible due to lot size, site slope or clearance limitations, or
    4. (d) as an interim measure for a lot or parcel of land until municipal sewers are available, provided that the municipality undertakes to ensure the continued operation of an approved *hauled sewage system* until the municipal sewers are available.
2. **(2)** Where a Class 5 *sewage system* is installed, a written agreement for the disposal of *sanitary sewage* from the *sewage system* shall be entered into with a *hauled sewage system* operator.

Table 11.5.1.1.C. (Cont'd)
Compliance Alternatives for Residential Occupancies
Forming Part of Article 11.5.1.1.

NUMBER	PART 8 REQUIREMENTS	PART 11 *COMPLIANCE ALTERNATIVE*

NUMBER	PART 8 REQUIREMENTS	PART 11 *COMPLIANCE ALTERNATIVE*
C99	8.2.1.4.	Existing clearances acceptable where a *sewage system* is replaced with another *sewage system* within the same class and the capacity of the replacement *sewage system* does not exceed the capacity of the existing *sewage system*.
C100	8.2.1.4.	Existing clearances are acceptable where a replacement *sewage system* requires lesser clearances than those required in Part 8 for the existing *sewage system*.
Column 1	2	3

3. Applicant's Position

The Applicant submitted that the existing Class 4 sewage system, currently serving a 3 bedroom rental cottage, which was installed circa 1961, has failed. The Applicant submitted that he is proposing to install a holding tank to replace the failed system as permitted by Clause 8.8.1.2.(1)(c) of the Building Code. He explained that Clause 8.8.1.2.(1)(c) of the Building Code permits the installation of a Class 5 sewage system "to upgrade a sewage system serving an existing building, where upgrading through the use of a Class 4 sewage system is not possible due to lot size, site slope or clearance limitations".

The Applicant submitted that he applied for a building permit to replace his existing, failed Class 4 sewage system with a Class 5 sewage system. He advised that the municipality refused to issue a building permit for a Class 5 sewage system, as their policy is to require a Class 4 sewage system over a Class 5, provided that Quinte Conservation would permit the installation of a Class 4.

The Applicant indicated that in this case, Quinte Conservation approved a Class 4 sewage system to be constructed on the property to replace the existing system, but it would require a raised septic bed to meet the requirements in the Building code. The Applicant maintained that the raised nature of the septic bed was not acceptable to him due to the small lot size, and the negative impact the raised system would have on the safety, utilization and value of the property.

The Applicant submitted that he was seeking a variance from the requirements of the Building Code to allow him to replace the failed Class 4 sewage system with a Class 5 sewage system or holding tank. The Applicant maintained that as the property was located entirely on a flood plain, a Class 5 sewage system would be the most reasonable environmental solution. The Applicant argued that due to the property size, and location of the cottage, the new Class 4 sewage system couldn't be positioned so that it would meet all the clearance distances required by the current Building Code. The Applicant stated that he was advised that the municipality could relax some of the clearance distance requirements in order to accommodate a replacement Class 4 sewage system, although they could not relax the Code requirement for a raised bed. The Applicant indicated that the municipality's position was that the septic bed would have to be raised 1.22 m to meet the Building Code.

The Applicant indicated that there was only one location on the property where the raised bed could be installed and this would be directly between the cottage and the water. The Applicant argued that installing a Class 4 sewage system with a 1.22 m raised bed in this location would ruin the recreational

use of the property, and significantly reduce the value of the property. The Applicant also stated that, "as the property had a dug well, there was concern that a raised bed could cause the septic runoff to flow south and contaminate the well". The Applicant also indicated that due to a number of large willow trees, a Class 4 sewage system would be negatively impacted by their roots, which would eventually lead to failure of the replacement Class 4 sewage system.

The Applicant advised that Quinte Conservation issued an approval that would allow for either a replacement sewage system or a holding tank to be installed on the property, and in light of the above, the Applicant maintained that a holding tank would be the best solution.

The Applicant also submitted that as an alternative to the holding tank, he would be willing to install a replacement Class 4 sewage system, if the municipality would reduce the raised bed requirement, allowing for a system that is fully in ground, like the current system.

4. Respondent's Position

The Respondent submitted that the subject Class 4 sewage system serves an existing cottage rental property, which is rented approximately 8 weeks in the summer. The Respondent advised that the property was located within the area regulated by the Quinte Conservation Authority and that a permit from the Conservation Authority is required by an Applicant prior to obtaining a building permit from the municipality. The Respondent indicated that in this case, the Conservation Authority issued an approval permit for a replacement Class 4 sewage system on the subject property, which is within the 1:100 year floodplain.

The Respondent pointed out that Sentence 8.8.1.1.(1) of the Building Code states, "Except as provided in Article 8.8.1.2., a Class 5 sewage system shall not be installed". He submitted that Clause 8.8.1.2.(1)(c) allows a holding tank to be installed to upgrade a sewage system serving an existing building where upgrading through the use of Class 4 sewage system is not possible due to lot size, slope or clearance limitations. In light of the Conservation Authority's approval to permit the installation of a replacement Class 4 sewage system in the same location, he submitted the Applicant's building permit application for a Class 5 sewage system was denied as the exemption in Clause 8.8.1.2.(1)(c) was not applicable.

The Respondent further submitted that Part 11 of the Building Code allows for the use of existing clearances where a sewage system is replaced with another sewage system within the same class and where the capacity of the replacement system does not exceed the capacity of the existing system as per Table 11.5.1.1.C.

Therefore, the Respondent concluded that, as the Conservation Authority issued an approval to permit the installation of a new Class 4 sewage system to replace the existing sewage system, there is sufficient area to install a new class 4 sewage system.

5. Commission Ruling

It is the decision of the Building Code Commission that the proposal to replace an existing Class 4 sewage system, which serves an existing 3 bedroom, 200 m^2 cottage, with a new Class 5 sewage system, does not provide sufficiency of compliance with Sentence 8.8.1.1.(1), 8.2.2.4.(2), 8.8.2.2.(1), Clause 8.8.1.2.(1)(c) and Table 11.5.1.1.C when considering Part 11 of Division B of the Building Code at 156 Onderdonk Lane Ameliasburgh, Ontario.

6. Reasons

i. The Building Code prohibits the installation for a Class 5 sewage system except as permitted in Article 8.8.1.2.

Sentence 8.8.1.2.(1) of the Building Code states that a Class 5 sewage system may be installed in the following circumstances:

a. where the proposed use of the *sewage system* is for a temporary operation, excluding seasonal recreational use, not exceeding 12 months in duration,

b. to remedy an unsafe *sewage system* where the remediation of the unsafe condition by the installation of a Class 4 *sewage system* is impracticable,

c. to upgrade a *sewage system* serving an existing *building*, where upgrading through the use of a Class 4 *sewage system* is not possible due to lot size, site slope or clearance limitations, or

d. as an interim measure for a lot or parcel of land until municipal sewers are available, provided that the municipality undertakes to ensure the continued operation of an approved *hauled sewage system* until the municipal sewers are available.

The Commission heard that the existing Class 4 sewage system serving the cottage has failed. Based on the evidence and testimony provided, the Commission believes that Clauses b) and c) could be applicable in this case.

However, it is the Commission's opinion that insufficient evidence was provided to demonstrate that the installation of a Class 4 sewage system is impracticable, as specified in Clause 8.2.1.2.(1)(b) or further to demonstrate, that a Class 4 system is not possible due to lot size, site slope or clearance limitations.

Dated at the City of Toronto this **11th** day in the month of **April** in the year **2016** for application number **S 2016-04**.

Judy Beauchamp, Chair-Designate

Ontario

Ministry of Municipal Affairs and Housing

BCC Ruling No. 00-44-776

BUILDING CODE COMMISSION DECISION ON B.C.C. #99-08-664

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Article 8.8.1.2. of Regulation 61, as amended by O. Reg. 22/98, 102/98 and 122/98 (the "Ontario Building Code").

AND IN THE MATTER OF an application by Mr. William Hawryluk, cottage owner, 170 Anton Street, Thunder Bay, Ontario for the resolution of a dispute with Mr. Allan Campbell, Director - Public Health Inspection, Thunder Bay District Health Unit, Thunder Bay, Ontario to determine whether the proposed installation of a Class 5 sewage system for a seasonal dwelling provides sufficiency of compliance with Article 8.8.1.2. of the Ontario Building Code at Lot No. 27, Plan W-786, Fire Number 730, Cloud Lake Road, Township of Crooks, District of Thunder Bay, Ontario.

APPLICANT
Mr. William Hawryluk, cottage owner
170 Anton Street
Thunder Bay, Ontario

RESPONDENT
Mr. Allan Campbell
Director - Public Health Inspection
Thunder Bay District Health Unit

PANEL
Mr. Roy Philippe, Chair
Mr. Bryan Whitehead
Mr. Doug Robinson

PLACE
Toronto, Ontario / Thunder Bay, Ontario / Mesa, Arizona

DATE OF HEARING
February 11, 1999

DATE OF RULING
February 11, 1999

APPEARANCES

APPLICANT
Mr. William Hawryluk cottage owner
cottage owner
Thunder Bay, Ontario

RESPONDENT
Ms. Lisa Kellogg, Field Supervisor
Thunder Bay District Health Unit
Thunder Bay, Ontario

RULING

1. The Applicant

Mr. William Hawryluk, cottage owner, has applied for a building permit under the Building Code Act, 1992 to install a Class 5 (holding tank) sewage system at his seasonal residence at Lot No. 27, Plan W-786, Fire Number 730, Cloud Lake Road, Township of Crooks, Ontario.

2. Description of Construction

The Applicant is proposing to install a new Class 5, or holding tank, sewage system at his recently built two storey, detached Group C - occupancy seasonal dwelling unit located on Cloud Lake. The building is described as an A-frame style cottage, having 8.5 fixture units, three bedrooms, and a total finished area of 102 m2 (1094 ft2). The total daily design flow rate is calculated at 1,600 litres per day. The cottage is intended to be used by five people. The property is currently served by a Class 1 earth pit privy sewage system.

The proposed new sewage system would consist of a 11,000 L (2,400 gallon) concrete holding tank. The effluent would be disposed to the holding tank from the cottage by means of gravity. The tank would be located to the west of the structure, and would be easily accessible from the driveway. The holding tank is placed on the site such that adequate clearance distances are maintained to the site=s lot lines. A holding tank service agreement has been entered into with a local sewage hauler.

<![endif]>

The site is very steep, with a slope exceeding thirty percent, and has an approximate area of 2,147 m2 (23,100 ft2). There is a small plateau on which the cottage was built. The native soils are described as rocky clay. The entire property, with the exception of the building and driveway, is treed.

<![endif]>

The water supply provided to the subject residence is a pressurized system that will be pumped from the lake.

<![endif]>

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed installation of a Class 5 holding tank is permitted at this site under Article 8.8.1.2. of the OBC. This provision sets out the conditions under which a Class 5 system may be installed. The intent of this Article seems to be to restrict the installation of new holding tanks, especially when serving seasonal recreational uses, unless extraordinary circumstances exist. If the proposal at issue cannot demonstrate compliance with one of the criteria set out in Article 8.8.1.2. then a holding tank is not allowed.

4. Provisions of the Ontario Building Code

Article 8.8.1.2. Acceptable Installation

(1) A Class 5 sewage system may be installed in the following circumstances:

a. where the proposed use of the sewage system is for a temporary operation, excluding seasonal recreational use, not exceeding 12 months in duration,
b. to permit the extension of an existing single-family dwelling provided that
c. the extension will not increase the wastewater load, and
d. the building is already served by a Class 5 sewage system,
e. to remedy an unsafe sewage system where the remediation of the unsafe condition by the installation of a Class 4 sewage system is impracticable,
f. to upgrade a sewage system on an existing lot or parcel of land, where upgrading through the use of a Class 4 sewage system is not possible due to lot size or clearance limitations, or
g. as an interim measure for a lot or parcel of land until municipal sewers are available, provided that the municipality undertakes to ensure the continued operation of an approved hauled sewage system until the municipal sewers are available.

(2) Where a Class 5 sewage system is installed, a written agreement for the disposal of sanitary sewage from the sewage system shall be entered into with a hauled sewage system operator

5. Applicant's Position

The Applicant submitted that he should be allowed to install a holding tank since, in his view, he conforms with Clause (1)(d) of Sentence 8.8.1.2. After a brief description of the site and its historical development, he introduced the mayor of the municipality and its Chief Building Official, who appeared as witnesses on his behalf.

The Chief Building Official noted that Clause 8.8.1.2.(1)(d) allows an upgrading of an existing sewage system to a Class 5 holding tank when a Class 4 system is not possible due to lot size or clearance limitations. The Chief Building Official indicated that this current Class 1 system constituted an existing facility as required under Clause 8.8.1.2.(1)(d), and it is this system that the Applicant intends to upgrade. Furthermore, he argued that the intent behind Clause 8.8.1.2.(1)(d) is to allow upgrades to a Class 5 system where there are tangible site constraints that would preclude the installation of a Class 4 system.

Bearing this in mind, he went on to argue that this site's constraint was the severe slope of his property, that ranges between 30 to 40 percent. A Class 4 system would not function and is not allowed to be installed on such a slope. While excessive slope is not specifically mentioned in Clause 8.8.1.2.(1)(d), the slope condition at this property, the Chief Building Official pointed out, certainly negates the option

of installing a Class 4 system just as not being able to meet the lot size or clearance limitations standards would do likewise. He concluded that a holding tank would provide less hazard to the land and lake below than the current Class 1 system.

The Applicant also argued that the installation of a holding tank, from an environmental point of view, would vastly improve the current situation. He indicated that there are other cottages in the area that have holding tanks that function well. As a result, he noted that the area is well served by experienced and licenced sewage hauling operators. The Applicant stated that he had already entered into a service agreement with a local sewage hauler in accordance with Sentence 8.8.1.2.(2).

6. Respondent's Position

The Respondent submitted that a holding should not be allowed for the subject property according to Article 8.8.1.2. She discussed the five conditions under which a holding tank would be acceptable and the proposal at issue did not conform to any. Nevertheless, regarding the Applicant=s arguments concerning Clause 8.8.1.2.(1)(d), she indicated that she agreed that upgrading an existing system could encompass improving from a Class 1 system, for which no permit is necessary, to a Class 5 facility. In her view, the earlier Class 1 system on the site does represent an existing situation.

However, she noted that the subject OBC Clause 8.8.1.2.(1)(d) listed only two specific conditions, lot size and clearance limitations, as the qualifying site constraints and no others. She further noted that slope is not listed. For this reason, the Respondent felt that the Code did not allow her to approve this proposed holding tank installation. To do so would be beyond her jurisdiction.

The Respondent then raised the issue that if holding tanks were to be more widely available this could cause a problem since no facility existed yet in the municipality to handle the hauled liquid waste.

Having made this case, the respondent indicated that she sympathized with the Applicant=s predicament. The difficulties with the site meant that basically no sewage system could be approved. Considering this from a practical standpoint she felt that a holding tank would be appropriate in this situation, especially since a pressurized system pumping water from the lake has already been installed in the cottage.

Finally, the Respondent expressed some uncertainty as to why a permit was issued for the construction of the building prior to the resolution of the sewage issue.

7. Commission Ruling

It is the decision of the Building Code Commission that the proposed installation of a Class 5 sewage system for a seasonal dwelling provides sufficiency of compliance with the Article 8.8.1.2. of the Ontario Building code at Lot No. 47, Plan W-786, Township of Crooks, District of Thunder Bay.

8. Reasons

1. A Class 5 sewage system may be installed to upgrade a sewage system on an existing lot or parcel land where upgrading through the use of a Class 4 system is not possible due to a lot size or clearance limitations. It is the opinion of the commission that this condition exists on this site since the only areas suitable by slope, for a Class 4 system are too close to the dwelling.
2. A Class 1 system and cottage existed on the site at the time of application and therefore Clause 8.8.1.2.(1)(d) applies.

Dated at Toronto this **11th**, day in the month of **February** in the year **1999** for application number **1998-62**..

Mr. Roy Philippe, Chair

Mr. Bryan Whitehead

Mr. Doug Robinson

Ontario

Ruling No.: 22-04-1596
Application No.: S-2021-16

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Sentence 8.8.1.1.(1), Sentence 8.8.1.2.(1) and Clauses 8.8.1.2.(1)(a)(b)(c) and (d) of Regulation 332/12, as amended, (the "Building Code").

AND IN THE MATTER OF an application by David Ballentine, for the resolution of a dispute with Robert Farrow, Chief Building Official, to determine whether the proposal to install a composting toilet and a Class 5 sewage system on a vacant property to serve a future building, provides sufficiency of compliance with Sentence 8.8.1.1.(1), Sentence 8.8.1.2.(1) and Clauses 8.8.1.2.(1)(a)(b)(c) and (d) of the Building Code, at Island A 472 of the Township of the Archipelago, Ontario.

APPLICANT	Mr. David Ballentine Owner Nobel, Ontario
RESPONDENT	Mr. Robert Farrow Chief Building Official Township of the Archipelago, Ontario
PANEL	Ms. Judy Beauchamp Mr. Michael Gooch Mr. Alexander Campbell
PLACE	via video conference
DATE OF HEARING	February 3, 2022
DATE OF RULING	February 3, 2022
APPEARANCES	Mr. Ray Hachigan Parry Sound, Ontario **Agent for the Applicant** Mr. Robert Farrow Chief Building Official Township of the Archipelago, Ontario **Designate for the Respondent**

RULING

1. Particulars of Dispute

The Applicant has applied for an alternative solution building permit, under the Building Code Act, 1992, to install a Class 5 sewage system to service a proposed 225 m^2 seasonal dwelling with a composting toilet on an island located in a UNESCO site known as the Georgian Bay Biosphere.

The Respondent determined that the alternative solution does not achieve the level of performance required by the applicable prescriptive requirements under Division B of the Building Code.

Therefore, the dispute before the is Commission is whether the proposal to install a composting toilet and a Class 5 sewage system on a vacant property to serve a 225 m^2 seasonal dwelling, provides sufficiency of compliance with Sentence 8.8.1.1.(1), Sentence 8.8.1.2.(1) and Clauses 8.8.1.2.(1)(a)(b)(c) and (d) of the Building Code.

2. Provisions of the Building Code in Dispute

Division B, Article 8.8.1.1 Prohibited Installation

(1) Except as provided in Article 8.8.1.2., a Class 5 sewage system shall not be installed.

Division B, Article 8.8.1.2 Acceptable Installation

(1) A Class 5 sewage system may be installed in the following circumstances:
(a) where the proposed use of the sewage system is for a temporary operation, excluding seasonal recreational use, not exceeding 12 months in duration,
(b) to remedy an unsafe sewage system where the remediation of the unsafe condition by the installation of a Class 4 sewage system is impracticable,
(c) to upgrade a sewage system serving an existing building, where upgrading through the use of a Class 4 sewage system is not possible due to lot size, site slope or clearance limitations, or
(d) as an interim measure for a lot or parcel of land until municipal sewers are available, provided that the municipality undertakes to ensure the continued operation of an approved hauled sewage system until the municipal sewers are available.

(2) Where a Class 5 sewage system is installed, a written agreement for the disposal of sanitary sewage from the sewage system shall be entered into with a hauled sewage system operator.

3. Applicant's Position

The Applicant has submitted that the Island A 472 (also known as Double Island) in the Township of the Archipelago, Ontario is a residentially zoned property which is currently vacant, save for a small shed. The island currently has limited vegetation cover and limited soil cover. The island is U-Shaped with limited development area on one of the arms and a 225 m^2, 3 bedroom cottage has been proposed on the larger of the 2 arms. The Applicant's application for hearing shows a future bedroom outbuilding on the property on the small arm.

In a previous application, the Applicant submitted a building permit for a Class 2 (Leaching Pit) sewage system to deal with greywater generated on the property. This application was refused

on the basis that there was insufficient soil on the property to support the system. In response, the Applicant submitted the current application to use a Class 5 Sewage System (Holding Tank) for the collection, storage and periodic removal for disposal of all greywater. The applicant submits that this is a better option for the area as it removes the wastewater from the site for treatment and disposal and thus limits any contamination of the area waters.

With regards to sizing of the Class 5 Sewage System, the Applicant submits that by removing the toilet there is less sewage flow for the building and further, argues that there are no references in the Building Code to holding tanks which deal only with greywater.

4. Respondent's Position

The Respondent's position is that the use of a Class 5 sewage system at this location at this time is not in compliance with the intent and objectives of the Building Code. Specifically, the Building Code has very stringent requirements around when a Class 5 sewage system may be used.

The Respondent provided an explanation of why the proposed alternative solution is insufficient and referenced the Functional and Objective statements of the Building Code around their decision.

The Respondent identified that there is a concern that the future use of the property may be different that the current intended use. Some of the concerns include: the composting toilet could be removed and replaced with a standard toilet, a lack of maintenance may result in a problem with leakage, or that a lack of over-sight could result in a problem with the system that causes discharge from the tank unknowingly.

In addition, the Respondent identified that the Township is concerned that at some point in the future the permitted use of a Class 5 System at this time, would permit an enlargement of the building through Part 11 of the Code.

5. Commission Ruling

It is the decision of the Building Code Commission that the proposal to install a class 5 sewage system on a vacant lot to serve a future dwelling unit, does not provide sufficiency of compliance with Division B, Article 8.8.1.1.and Sentence 8.8.1.2.(1) of the Building Code at Island A 472 in the Township of the Archipelago, Ontario.

6. Reasons

i) **Article 8.8.1.1. Prohibited Installation** of Division B of the Building Code states:

(1) Except as provided in Article 8.8.1.2., a Class 5 sewage system shall not be installed.

Article 8.8.1.2. Acceptable Installation, of Division B of the Building Code states:

(1) A Class 5 sewage system may be installed in the following circumstances:

(a) where the proposed use of the sewage system is for a temporary operation, excluding seasonal recreational use, not exceeding 12 months in duration,

(b) to remedy an unsafe sewage system where the remediation of the unsafe condition by the installation of a Class 4 sewage system is impracticable,

(c) to upgrade a sewage system serving an existing building, where upgrading through the use of a Class 4 sewage system is not possible due to lot size, site slope or clearance limitations, or

(d) as an interim measure for a lot or parcel of land until municipal sewers are available, provided that the municipality undertakes to ensure the continued operation of an approved hauled sewage system until the municipal sewers are available.

The Commission heard that a permanent, seasonal dwelling is proposed on the subject property which is currently vacant. The Commission heard no evidence or testimony from the parties that any of the above permissible conditions set out in Article 8.8.1.2. have or could be met. Therefore, it is the Commission's opinion that the proposal to install a class 5 sewage system on this property does not provide sufficiency of compliance with Article 8.8.1.2. of Division B of the Building Code.

ii) The Applicant submitted that an Alternative Solution for the property was available through the use of a composting toilet and a Class 5 Sewage System for the greywater. The Commission was not provided with a full and complete analysis of the Alternative Solution with regards to the Building Code Functional and Objective statements. The limited analysis that was provided as evidence, however, suggests that the proposed Alternative Solution would not provide sufficiency of compliance with Sentences 8.8.1.1.(1) and 8.8.1.2.(1) of Division B of the Building Code. Therefore, it is the Commission's opinion that the proposal to install a class 5 sewage system on this property does not provide sufficiency of compliance with Article 8.8.1.2. of Division B of the Building Code.

iii) The Applicant's submission states that the proposed Alternative Solution is partially based on the fact that Building Code does not address the use of Class 5 Sewage System when only greywater is to be collected.

By definition of "Sanitary Sewage", the Building Code does not differentiate types of sewage and therefore, greywater is sanitary sewage. As a result, Sentence 8.8.1.2.(1) is applicable to the proposed Alternative Solution.

iv) The Commission found that the Alternative Solution as presented did not sufficiently demonstrate that the objectives and functional statements have been met and the required level of performance achieved. Therefore, it is the Commission's opinion that the proposal to install a class 5 sewage system on this property does not provide sufficiency of compliance with Article 8.8.1.2. of Division B of the Building Code.

It should be noted that this ruling is specific to the facts of this dispute and property and the above reasons should not be interpreted as precedent setting statements.

R.J. Burnside & Associates Limited 6990 Creditview Road, Unit 2 Mississauga ON L5N 8R9 CANADA
telephone (905) 821-1800 **fax** (519) 941-8120 **web** www.rjburnside.com

BURNSIDE
THE DIFFERENCE IS OUR PEOPLE

December 4, 2023

Via: Email

Ms. Nancy Regan & Mr. David Ballentine
Island 472A
Township of The Archipelago, ON

Dear Nancy & David:

Re: Proposed Onsite Sewage System Design Brief
Island 472A, Perry Sound, Ontario
Project No.: 300057506.0000

1.0 Introduction

R.J. Burnside & Associates Limited (Burnside) has completed the design of a new onsite sewage system to service a proposed cottage at Island 472A ("Double Island") located within the Township of the Archipelago, Ontario in Georgian Bay in the District of Parry Sound. Our design is based on the requirements of Part 8 of the Ontario Building Code (OBC).

It is proposed to construct a new seasonal one-story, 3-bedroom, one-and-a-half-bathroom cottage with a floor area of approximately 232 m^2. The proposed dwelling will be serviced by a new onsite sewage system.

The purpose of this letter is to present a detailed design to support a building permit application to the Township of the Archipelago.

2.0 Subsurface Investigations

Burnside staff conducted a site visit on September 8, 2023. Double Island is a rocky island with (shallow) exposed bedrock at the ground surface, so no soil sample was collected for grain size analysis. Due to the presence of bedrock on the site, the proposed dispersal bed will be raised and constructed using imported sand fill. A layer of low permeability soil fill is specified to be placed over any bedrock surface, prior to placing imported sand material.

3.0 Daily Design Flows

The proposed cottage is a 3-bedroom, one-and-a-half-bathroom dwelling with a total floor area of approximately 232 m2. Daily sewage flows have been calculated in accordance with the current OBC requirements (OBC Table 8.2.1.3.A), as follows:

Table 1: Daily Sewage Design Flows

	Unit Flow (L/day)	Total Units	Total Flow (L/day)
3-Bedroom Dwelling	1,600	1	1,600
Plus, the greater of:			
Floor Area, or	100 L per 10 m^2 over 200 m^2 up to 400 m^2	232 m^2	400
Fixtures	35 L for each fixture unit over 20 fixture units	20 fixture units	0
Total Sewage Flow			2,000

Therefore, the total daily design sanitary sewage flow for the proposed cottage will be 2,000 L/day. A copy of the design calculations are attached.

4.0 Proposed Sewage Work

The proposed sewage system will consist of a Waterloo Biofilter system, which is certified to CAN/BNQ 3680-600 as a Level IV treatment unit and is therefore permitted for use in Ontario in accordance with the requirements of OBC 8.6.2.2. The system consists of a Waterloo Biofilter anaerobic digester with an internal pump chamber, a Waterloo Biofilter treatment tank (HDPE Tank) and a shallow buried trench leaching bed for disposal of treated effluent. The system layout is shown on Drawing SS1.

A copy of Waterloo Biofilter's certification documentation is attached. The components of the sewage system design have been specified based on the requirements of the certification, which dictates the various permissible tank sizes and rated capacities.

4.1 Waterloo Biofilter System

The proposed Waterloo Biofilter Anaerobic Digester Tank is a Roth Anaerobic Digester (Model ADIPC-4700) that provides settling of solids and anaerobic digestion, reducing the TSS and BOD5 concentrations in the wastewater. Risers and access hatches are required at both the inlet and outlet. The Anaerobic Digester tank location is shown on Drawing SS1.

The ADIPC-4700 digester tank is rated for a maximum flow of 2,000 L/day and is equipped with an internal pump vault which doses digester effluent to the Waterloo Biofilter treatment unit.

The pump vault will be equipped with a simplex submersible effluent pump (Liberty 280 0.5 HP or approved equivalent) as specified and supplied by Waterloo Biofilter. The pump will be timer-controlled to dose the effluent to the Waterloo Biofilter treatment system.

The treatment unit is comprised of a bulk-filled plastic tank (HDPE Tank Model BFHD20) with a rated treatment capacity of 2,000 L/day which is adequate for the design flow of 2,000 L/day. The HDPE tank is bulk-filled with foam filter media which provides surface area for attached growth and a pre-installed manifold with spray nozzles. The effluent is sprayed from the top manifold onto the foam media and percolates down through the foam for enhanced treatment by the microorganisms.

A second compartment, where treated effluent collects, is equipped with a simplex submersible effluent pump for leaching bed dosing and recirculation. Treated effluent is pumped from the biofilter tank to the shallow buried trench leaching bed by a submersible effluent pump (Liberty 280 0.5 HP or approved equivalent) rated for 2.1 L/s at 7.3 TDH. The recommended initial timer settings are 40 seconds ON, 59 minutes and 20 Seconds OFF. The pump will time-dose the treated effluent to the shallow buried trench leaching bed and recirculate a portion of the treated effluent back to the inlet of the anaerobic digester tank for enhanced treatment. The bed will be dosed in accordance with the requirements for shallow buried trench leaching beds, which must be time-dosed over a 24-hour period.

4.2 Shallow Buried Trench Leaching Bed

A shallow buried trench leaching bed is proposed for the dispersal of the treated effluent from the Waterloo Biofilter treatment tank.

According to the OBC, shallow buried trench systems may be installed in soil, or leaching bed fill with a T-time between 1-125 min/cm (8.7.2.1. (b)). The proposed dispersal bed will be constructed using imported sand fill with a T-time of 6 min/cm to 8 min/cm. As per Table 8.7.3.1, the minimum length of distribution pipe required for shallow buried trenches in soils with a T-time of less than 20 is calculated as follows:

$$L = Q/75$$

Where:

L = the minimum length of distribution pipe
Q = the daily sewage design flow (2,000 L/day)

Therefore, the total length of the distribution pipe required for this system is 27.0 m. Two runs of 15.0 m will be provided for a total of 30 m, which is the minimum permissible total length of piping for SBTs. The shallow buried trenches are to consist of a 32 mm diameter pressurized distribution pipe housed in a chamber as shown on Drawing SS1. They will be equipped with appropriate end access ports for regular flushing and maintenance. The sizing of the dosing pump has taken into consideration the requirement to maintain a minimum of 600 mm pressure head at the end of each lateral.

Details of the proposed system are provided on Drawing SS1.

5.0 Installation, Operation and Maintenance

The proposed sewage system must be installed by a licensed sewage system installer. The Engineering Inspection Schedule is outlined on Drawing SS1 and identifies the key milestones which should be inspected and approved by the engineer during construction.

The proposed sewage system will require periodic inspection and maintenance. As required by the OBC, the property owner must establish a maintenance contract with an authorized service provider of the Waterloo Biofilter treatment unit. Regular maintenance activities associated with this system would typically include the following:

- Periodic tank pump-outs, as required.
- Pump maintenance and replacement of parts, as required.
- Periodic cleaning of the septic tank effluent filter, as required.
- Maintenance of the Waterloo Biofilter treatment unit, as required.
- Annual sampling of the treatment unit in accordance with Section 8.9.2.4. of the OBC.
- Regular flushing of SBT piping to ensure proper pressurized distribution throughout the beds.

As with any onsite sewage system, proper care and use are critical for maintaining a properly functional system. The occupants should be briefed regarding daily cleaning and maintenance activities, and what types of products should not be flushed down the drain (e.g., wipes of any kind, coffee grinds, chemicals, cleaning products, etc.). The leaching bed area must be protected from trees or structures, extensive landscaping and vehicular loading.

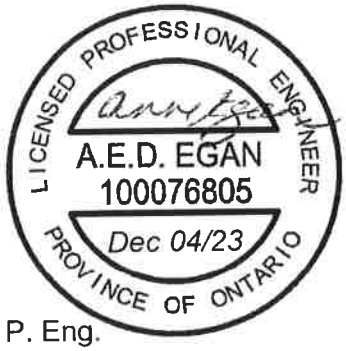
6.0 Summary

The total projected design sewage flow for the cottage is 2,000 L/day. The proposed sewage system has been designed according to the requirements of the OBC and includes a Waterloo Biofilter Treatment System and a shallow buried trench leaching bed.

We trust that the information provided herein is sufficient. Should you have any questions or require any further information, please do not hesitate to contact us.

Yours truly,

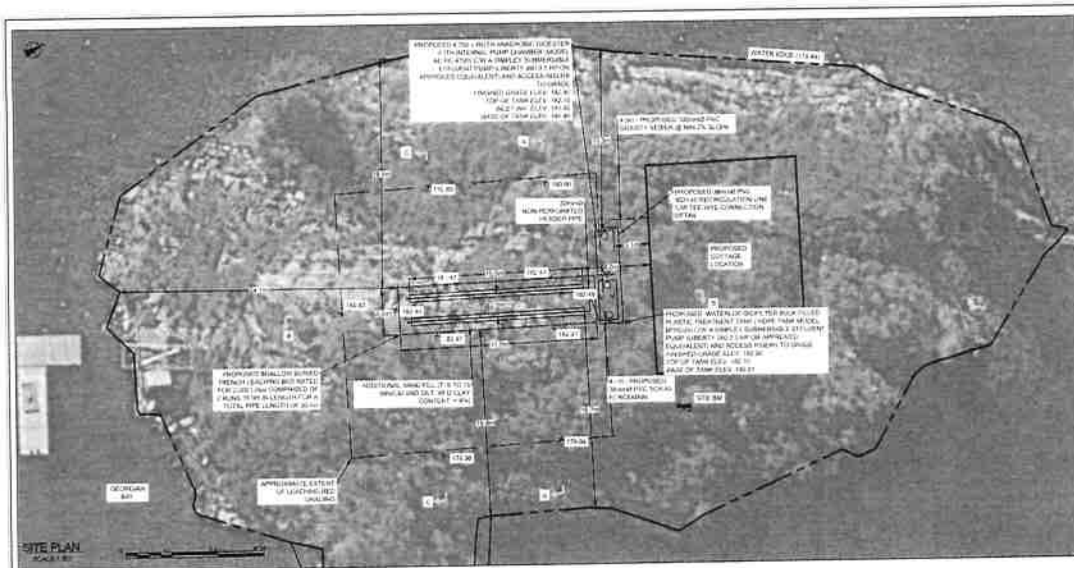
R.J. Burnside & Associates Limited



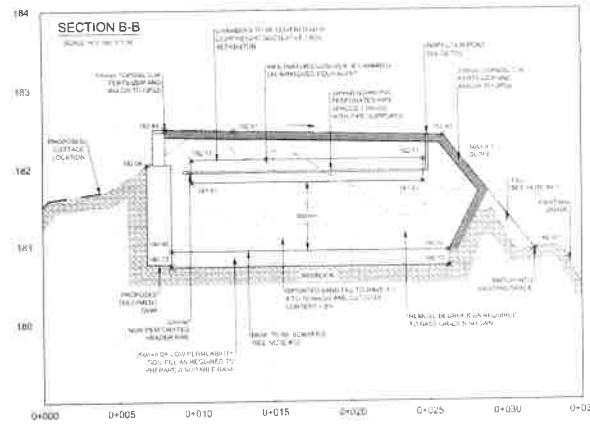
Pratima Sharma, C. Tech.
Wastewater Technologist
PS/AE:clr

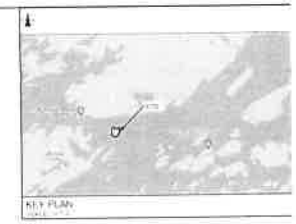
Anne Egan, P. Eng.
Onsite Wastewater Specialist

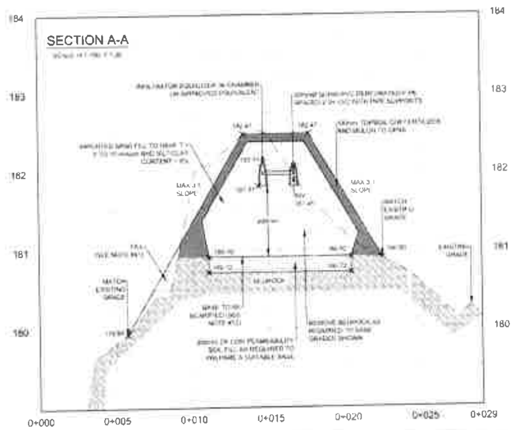
Enclosure(s) Drawing SS1
Design Flow Calculation Sheet
Waterloo Biofilter CAN/BHQ Certificate
Schedule 1: Designer Information Form

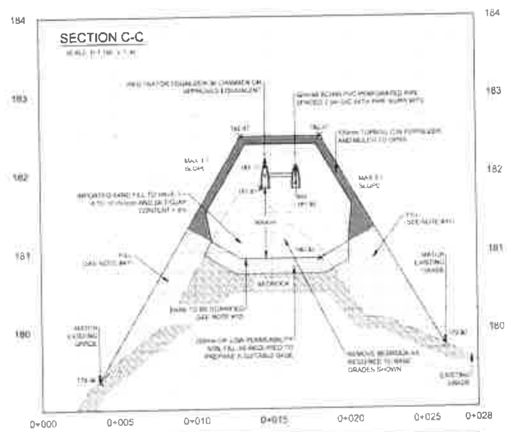


SITE PLAN



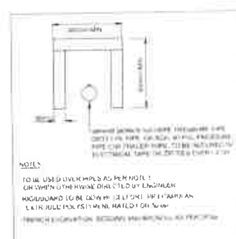






DESIGN NOTES

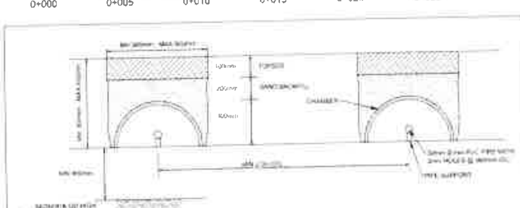
SEWAGE SYSTEM CONSTRUCTION NOTES



RIGIDBOARD INSULATION DETAIL

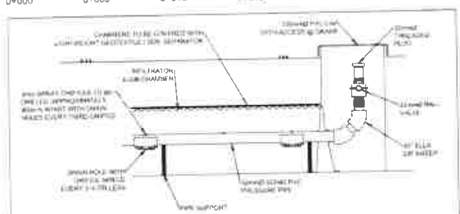
SCALE: N.T.S.

ENGINEERING INSPECTION SCHEDULE



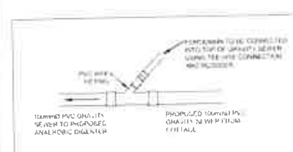
SHALLOW BURIED TRENCH DETAIL

SCALE: N.T.S.



TYPICAL DETAIL - SHALLOW BURIED TRENCH END PORT

SCALE: N.T.S.



WYE CONNECTION DETAIL

SCALE: N.T.S.

NOT FOR CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER
A.E.D. EGAN
100076605
PROVINCE OF ONTARIO

LEGEND

BURNSIDE

MS. NANCY REGAN AND MR. DAVID BALLENTINE

PROPOSED SEWAGE SYSTEM DESIGN

SITE PLAN, CROSS SECTIONS, DETAILS AND NOTES

ISLAND 42-A, TOWNSHIP OF THE ARCHIPELAGO, ONTARIO

SS1

BURNSIDE

CALCULATION SHEET

Project Name: Double Island
Project Number: 57506
Date: 26-Sep-23

input required

PRELIMINARY FLOW ESTIMATES
Taken from O.B.C. Tables 7.4.9.3. and 8.2.1.3.A.

House Size: **3** bedroom
232 m2

Description		Number of Units	Additional Flow per Unit (L)	Total Flow (L/day)
Base Flow				1600
Additional Flow				
i) Each bedroom over 5		0	500	0
ii) Area over $200m^2$.				
A) Each $10m^2$ over $200m^2$ to $400m^2$		4	100	400
B) Each $10m^2$ over $400m^2$ to $600m^2$		0	75	0
C) Each $10m^2$ over $600m^2$		0	50	0
Total Additional Sewage Flow from Area				400
iii) Fixture Units over 20		0	50	0
Addition flow (greatest of i,ii,iii)				400
Total Sewage Flow for Cottage:				**2000** L/day
				2000

Fixtures	Number of Fixtures	Fixture Units per Fixture	Total Fixture Units
Bathroom Group (flush tank)	1	6	6.0
Separate Lavatory Sink	0	1	0.0
Toilet	1	4	4.0
Other sinks (kitchen, laundry)	1	1.5	1.5
Clothes Washer	1	1.5	1.5
Dishwasher	1	1	1.0
Separate tub/shower	0	1.5	0
Floor drain	0	3	0
			0
Total Fixture Units			14.0

(Building Name) System

Required septic tank size = 4000 L minimum

Native Percolation time, T = min/cm Native Bedrock

Imported Percolation time = **8** min/cm Imported sand

Option #5 - Shallow Buried Trench

Length of distribution pipe required = 27 m Native Bedrock
Length of runs = 15.00 m
Number of runs = 2.00 runs
Length of distribution pipe provided = 30 m
Area required = 60 m2

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ANNEX
TO THE CERTIFICATE

WATERLOO BIOFILTER SYSTEMS INC.
65 Massey Road, Suite C
Guelph, Ontario N1H 7M6

CAN/BNQ 3680-600/2009-05-01 M2 (2017-07-18) *Onsite Residential Wastewater Treatment Technologies*

Certificate number: **2312**
Issue date: **2022-07-19**
Expiry date: **2024-07-31**

Stand-alone wastewater treatment systems

Model Waterloo Biofilters®

Anaerobic Digester

Capacity:

Maximum Hydraulic capacity (L/d)	Minimum Digester Volume (L)	Minimum InnerTube™ Volume (L) (1)
1,100	2,077	220
1,600	3,021	320
2,000	3,776	400
2,400	4,531	480
2,500	4,720	500
3,000	5,664	600
3,500	6,608	700
4,000	7,552	800
4,500	8,496	900
5,000	9,440	1,000
5,500	10,384	1,100
6,000	11,328	1,200
6,500	12,272	1,300
7,000	13,216	1,400
7,500	14,160	1,500
8,000	15,104	1,600
8,500	16,048	1,700
9,000	16,992	1,800
9,500	17,936	1,900
10,000	18,880	2,000

(1) The "Inner tube" is the term used to describe the long corrugated pipe forcing a longer path of water in the digester. The volume of the inner tube is included in the minimum effective volume of the digester.

Designation:	AD.
Material:	Constructed using concrete, plastic, or fibreglass tank that conforms with the strength and watertightness requirements of Standard CAN/CSA-B66 or Standard BNQ 3680-905, or equivalent acceptable to the Authority having jurisdiction.
Dosing:	External or internal pump chamber. Demand or timed dosed.
Others:	Single or double compartment tank. No effluent filter required. InnerTube outlet opposite tank outlet or pump. One or multiple tanks.

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65 Massey Road, Suite C
Guelph, Ontario N1H 7M6

CAN/BNQ 3680-600/2009-05-01 M2 (2017-07-18) *Onsite Residential Wastewater Treatment Technologies*

Certificate number: **2312**
Issue date: **2022-07-19**
Expiry date: **2024-07-31**

Waterloo Biofilter

Capacity:

Designation	Maximum Hydraulic Capacity (L/d)	Minimum Foam Filter Media Volume (m^3)	Minimum Foam Filter Media Volume (ft^3)
11	1,100	1.5	54
16	1,600	2.2	79
20	2,000	2.8	99
24	2,400	3.4	119
25	2,500	3.5	124
30	3,000	4.2	148
35	3,500	4.9	173
40	4,000	5.6	198
45	4,500	6.3	222
50	5,000	7.0	247
55	5,500	7.7	272
60	6,000	8.4	297
65	6,500	9.1	321
70	7,000	9.8	346
75	7,500	10.5	371
80	8,000	11.2	396
85	8,500	11.9	420
90	9,000	12.6	445
95	9,500	13.3	470
100	10,000	14.0	494

Configuration:

SH = Shed with open-bottom.
SHFB = Shed with full bottom.
BA = Baskets in concrete tank.
BFCN = Bulk filled concrete tank.
BFHD = Bulk filled plastic tank.
BFFG = Bulk filled fibreglass tank.

Certificate Precisions

Treatment Class: Class B-IV.

Influent Temperature: The tests specified in articles 8.1 and 8.2 were carried out with influent wastewater, at a minimum controlled temperature of 11 °C ± 1 °C.

Others: This treatment chain has no septic tank. The anaerobic digester is the first step of the treatment chain.

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65 Massey Road, Suite C
Guelph, Ontario N1H 7M6

CAN/BNQ 3680-600/2009-05-01 M2 (2017-07-18) *Onsite Residential Wastewater Treatment Technologies*

Certificate number: **2312**
Issue date: **2022-07-19**
Expiry date: **2024-07-31**

Waterloo Flatbed Biofilter

Capacity:

Designation	Flat Bed Modules	Flat Bed Chain Treatment Capacity [1] (L/d)	Minimum Foam Filter Media Volume (m^3)	Minimum Foam Filter Media Volume (ft^3)
11	2 units of FB-800	1,670	2.9	104
16	2 units of FB-800	1,670	2.9	104
20	2 units of FB-1000	2,000	3.5	125
24	3 units of FB-800	2,505	4.4	156
25	3 units of FB-800	2,505	4.4	156
30	3 units of FB-1000	3,000	5.3	187
35	2 units of FB-800 2 units of FB-1000	3,670	6.5	229
40	4 units of FB-1000	4,000	7.0	250
45	6 units of FB-800	5,010	8.8	312
50	6 units of FB-800	5,010	8.8	312
55	2 units of FB-800 4 units of FB-1000	5,670	10.0	354
60	6 units of FB-1000	6,000	10.6	375
65	8 units of FB-800	6,680	11.8	416
70	2 units of FB-800 6 units of FB-1000	7,670	13.6	479
75	2 units of FB-800 6 units of FB-1000	7,670	13.6	479
80	8 units of FB-1000	8,000	14.1	500
85	8 units of FB-800 2 units of FB-1000	8,680	15.3	541
90	6 units of FB-800 4 units of FB-1000	9,010	15.9	562
95	2 units of FB-800 8 units of FB-1000	9,670	17.1	604
100	10 units of FB-1000	10,000	17.7	625

Configuration: FB: Flatbed with open-bottom.

Flat Bed Modules	Flat Bed Treatment Capacity [1] (L/d)	Minimum Foam Filter Media Volume (m^3)	Minimum Foam Filter Media Volume (ft^3)
FB-800	835	1.47	52.1
FB-1000	1000	1.77	62.5
FB-1200	1167	2.06	72.9

WATERLOO BIOFILTER SYSTEMS INC.
65 Massey Road, Suite C
Guelph, Ontario N1H 7M6

CAN/BNQ 3680-600/2009-05-01 M2 (2017-07-18) *Onsite Residential Wastewater Treatment Technologies*

Certificate number:	**2312**
Issue date:	**2022-07-19**
Expiry date:	**2024-07-31**

Waterloo Flatbed Biofilter

Certificate Precisions

Treatment Class:	Class B-IV.
Influent Temperature:	The tests specified in articles 8.1 and 8.2 were carried out with influent wastewater, at a minimum controlled temperature of 11 °C ± 1 °C.

Others: This treatment chain has no septic tank. The anaerobic digester is the first step of the treatment chain.

(1) *The Waterloo Biofilter treatment capacity of a Flat Bed system is the sum total of the Flat Bed Treatment Capacities of the Flat Bed Models used in the system. Flat Beds may be laid out in 'parallel', 'series', or combination thereof. The designation of a Flat Bed system is the total treatment capacity with the last two digits truncated. E.g. a system comprised of two FB-800 models has treatment capacity of 835 * 2 = 1,670 L/d and a designation number of 16.*

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CAN/BNQ 3680-600/2009-05-01 M2 (2017-07-18) *Onsite Residential Wastewater Treatment Technologies*

Certificate number:	**2312**
Issue date:	**2022-07-19**
Expiry date:	**2024-07-31**

Model Designation	
Class B-IV:	AD-SH11, AD-SHFB11, AD-BA11, AD-BFCN11, AD-BFHD11, AD-BFFG11, AD-FB11
	AD-SH16, AD-SHFB16, AD-BA16, AD-BFCN16, AD-BFHD16, AD-BFFG16, AD-FB16
	AD-SH20, AD-SHFB20, AD-BA20, AD-BFCN20, AD-BFHD20, AD-BFFG20, AD-FB20
	AD-SH24, AD-SHFB24, AD-BA24, AD-BFCN24, AD-BFHD24, AD-BFFG24, AD-FB24AD-SH25, AD-SHFB25, AD-BA25, AD-BFCN25, AD-BFHD25, AD-BFFG25, AD-FB25
	AD-SH30, AD-SHFB30, AD-BA30, AD-BFCN30, AD-BFHD30, AD-BFFG30, AD-FB30
	AD-SH35, AD-SHFB35, AD-BA35, AD-BFCN35, AD-BFHD35, AD-BFFG35, AD-FB35
	AD-SH40, AD-SHFB40, AD-BA40, AD-BFCN40, AD-BFHD40, AD-BFFG40, AD-FB40
	AD-SH45, AD-SHFB45, AD-BA45, AD-BFCN45, AD-BFHD45, AD-BFFG45, AD-FB45
	AD-SH50, AD-SHFB50, AD-BA50, AD-BFCN50, AD-BFHD50, AD-BFFG50, AD-FB50
	AD-SH55, AD-SHFB55, AD-BA55, AD-BFCN55, AD-BFHD55, AD-BFFG55, AD-FB55
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	AD-SH70, AD-SHFB70, AD-BA70, AD-BFCN70, AD-BFHD70, AD-BFFG70, AD-FB70
	AD-SH75, AD-SHFB75, AD-BA75, AD-BFCN75, AD-BFHD75, AD-BFFG75, AD-FB75
	AD-SH80, AD-SHFB80, AD-BA80, AD-BFCN80, AD-BFHD80, AD-BFFG80, AD-FB80
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	AD-SH90, AD-SHFB90, AD-BA90, AD-BFCN90, AD-BFHD90, AD-BFFG90, AD-FB90
	AD-SH95, AD-SHFB95, AD-BA95, AD-BFCN95, AD-BFHD95, AD-BFFG95, AD-FB95
	AD-SH100, AD-SHFB100, AD-BA100, AD-BFCN100, AD-BFHD100, AD-BFFG100, AD-FB100

List of recognized manufacturers for system components

Concrete Precasters

BOYD BROS CONCRETE
5450 CCuddy Street
Osgoode, Ontario K0A 2W

Plastic Component Manufacturers

ROTH GLOBAL PLASTICS
One General Motor Drive
P.O. Box 245
Syracuse, New York, 13211

List of recognized assemblers

BOYD BROS CONCRETE
5450 Cuddy Street
Osgoode (Ontario) K0A 2W0

WATERLOO BIOFILTER SYSTEMS INC.
65 Massey Road, Suite C
Guelph, Ontario N1H 7M6

CAN/BNQ 3680-600/2009-05-01 M2 (2017-07-18) *Onsite Residential Wastewater Treatment Technologies*

Certificate number:	**2312**
Issue date:	**2022-07-19**
Expiry date:	**2024-07-31**

FLOW DIAGRAM OF WATERLOO BIOFILTER ®

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Certificate number: **2312**
Issue date: **2022-07-19**
Expiry date: **2024-07-31**

HISTORY	
Date	**Modification description**
2016-07-05	Issuance of certificate.
2016-08-08	Minor Corrections of different sections.
2018-05-22	Addition of Waterloo Flatbed biofilter systems.
2018-07-04	Renewal of certificate.
2018-08-30	Addition of Waterloo Flatbed biofilters information.
2019-07-18	Update of the certificate according to the M2 changes to the standard and M1 changes to the protocol.
2020-07-15	Correction of ROTH GLOBAL PLASTICS site address. Renewal of certificate.
2021-04-26	Correction from Waterloo Biofilter Treatment capacity (L/d) to Maximum Hydraulic Capacity (L/d). Modification of the business address.
2021-08-30	Addition of models AD-SH24, AD-SHFB24, AD-BA24, AD-BFCN24, AD-BFHD24, AD-BFFG24, AD-FB24.
2021-11-26	Withdrawn of concrete precasters MacGregor Concret Products, Winona Concrete & Pipe Products and Unit Precast (Breslau) Ltd. Addition of Boyd Bros Concrete.
2022-07-19	Renewal of certificate.

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	Unit no.	Lot/con.
Island 472A		

Municipality	Postal code	Plan number/ other description
Township of Archipelago		

B. Individual who reviews and takes responsibility for design activities

Name	Firm
Anne Egan	R.J. Burnside & Associates Limited

Street address	Unit no.	Lot/con.
6690 Creditview Road	2	

Municipality	Postal code	Province	E-mail
Mississauga	L5N8R9	ON	anne.egan@rjburnside.com

Telephone number	Fax number	Cell number
(905) 821-5888	(905) 821-1809	( )

C. Design activities undertaken by individual identified in Section B. [Building Code Table 2.20.2.1]

☐ House	☐ HVAC – House	☐ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☒ On-site Sewage Systems

Description of designer's work

Design of a new Class 4 Sewage System servicing the propsed cottage at Island 472A in Parry sound District, Ontario. Consisting of a Waterloo Biofilter treatment system and a shallow buried trench leaching Bed.

D. Declaration of Designer

I Anne Egan 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 2.17.4. of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: _____

Firm BCIN: _____

☐ I review and take responsibility for the design work and am qualified in the appropriate category as an "other designer" under subsection 2.17.5. 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: P. Eng.

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have authority to bind the corporation or partnership (if applicable).

2023/12/04 — Date

Anne Egan — Signature of Designer

*For the purposes of this form, "individual" means the "person" referred to in Clause 2.17.4.7.(1)(d), Article 2.17.5.1. and all other persons who are exempt from qualification under Subsections 2.17.4. and 2.17.5.

NOTE:

1. Firm and Individual BCIN numbers are not required for building permit applications submitted prior to January 1, 2006
2. Schedule 1 does not need to be completed by architects, or holders of a Certificate of Practice or a Temporary License under the *Architects Act*.