

MAGIC LAKE ESTATES WATER AND SEWER COMMITTEE

Notice of Meeting on Tuesday, May 8, 2018 at 9:30 a.m. Main Conference Room, 479 Island Highway, Victoria, BC

Kathy Heslop (Chair)

David Reed

Michael Fossl

Joe Gill

Director Dave Howe

Wally Foster

Alex Wilson

AGENDA

1. Approval of Agenda

2. Adoption of Minutes of April 10, 2018

3. Water Update

(verbal report with handout)

4. Wastewater Update

(verbal report with handout)

5. Operations Update

(verbal report with handout)

6. Amendment of Bylaw No. 1990 to Include One Property (2614 Chart Drive) into the Sewer Service Area

(staff report)

- 7. Correspondence
- 8. New Business
- 9. Adjournment



Minutes of a Meeting of the Magic Lake Estates Water and Sewer Committee Held Tuesday, April 10, 2018 in the Main Conference Room, 479 Island Highway, Victoria, BC

PRESENT: Committee Members: A. Wilson (Vice-chair), W. Foster, M. Fossl, J. Gill, D. Reed

Staff: I. Jesney, Senior Manager, Infrastructure Engineering, M. McCrank, Senior Manager, Infrastructure Operations, D. Robson, Manager, Saanich Peninsula and

Gulf Islands Operations, S. Orr (recorder)

ABSENT: K. Heslop (Chair), CRD Electoral Area Director D. Howe

Acting Chair Wilson called the meeting to order at 9:30 a.m.

1 Approval of Agenda

MOVED by J. Gill, SECONDED by M. Fossl,

That the agenda be approved as distributed.

CARRIED

2 Adoption of Minutes of March 13, 2018

The following changes were made to the minutes:

- Add under New Business "The committee thanked Scott Mason and staff for their work"
- Remove the motion under New Business. A member on the wastewater service is required to make the motion. Michael Fossl is not on the wastewater service and therefore cannot make the motion.

MOVED by M. Fossl, SECONDED by D. Reed,

That the minutes of March 13, 2018 be adopted as amended.

CARRIED

3 Water Update

I. Jesney presented a verbal report and provided a handout that will be included as part of the agenda package.

4 Wastewater Update

I. Jesney presented a verbal report and provided a handout that will be included as part of the agenda package.

5 Operations Update

M. McCrank presented a verbal report and provided a handout that will be included as part of the agenda package.

6 Work / Project Plan and Communications Strategy - Magic Lake North Dam & Buck Lake Dam Vegetation Clearing

D. Robson spoke to the report and provided an overview of the work required to meet dam safety regulatory requirements. He stated that he met with Pender Island Parks and Recreation Commission to discuss the work to be done and plans to meet with stakeholders to provide an opportunity for questions prior to the work being done.

He answered questions from the committee about details of the work plan.

7 Correspondence

There was no correspondence.

8 New Business

- M. McCrank gave a verbal update and answered questions from the committee on the following items:
 - i. **Schooner WWTP Gen Set** –High-level estimate for the purchase and installation of an 80 kilowatt generator costs \$90,000 and a UV only 15kw generator is \$42,000.
- ii. Wastewater Treatment Plant Tour Request Staff is in the process of planning a tour.
- iii. Re-use of Rainwater The Committee does not have the authority to monitor and manage use of rain water particularly with regard to internal plumbing. Information was provided for the Committee on where to obtain further resources on the topic via email by M. McCrank on March 21, 2018.
- iv. Water Conservation Messaging- Suggested a time period of May 1 September 30.
- I. Jesney stated that the motion made at the meeting held March 13, 2018 requires that the mover and seconder be from the sewer service.

MOVED by D. Reed, SECONDED by W. Foster,

That staff explore options for linking sewer rates to water consumption rates and provide advantages and disadvantages as well as outline the process required.

CARRIED

- I. Jesney stated that he will make inquiries with staff to see how much work would be involved and to explore options and can bring it back to the June meeting.
- I. Jesney gave a verbal update about attendance at meetings and stated that the CRD Board Procedures Bylaw does not address attendance requirements for committee meetings.

9 Adjournment

MOVED by J. Gill, **SECONDED** by M.Fossl,

That the meeting be adjourned at 10:46 a.m.



May 8, 2018

File: 0360-20

Magic Lake Estates Water and Sewer Committee

Magic Lake Estates Water Service

Water Treatment Plant Repairs

• Revised drafts of the release to the insurer and construction contract to the contractor's lawyer have been sent and are awaiting responses.

Content Prepared by: Scott Mason



File: 0360-20

Magic Lake Estates Water and Sewer Committee

May 8, 2018

MAGIC LAKE ESTATES WASTEWATER

Wastewater Infrastructure Projects – Phase 1 Update

Sewer Pipe Replacement - Buck Lake & Privateers Road

- Detailed design was completed and tender was issued on April 23, 2018.
- Pre-Tender meeting was held on May 1st and three contractors attended. They all indicated they are very busy but hopefully multiple competitive bids will be received.
- The tender is scheduled to close on May 14. An earlier committee meeting may be requested for late May to present the tender results to the Committee.

Inflow & Infiltration Program

 A final report summarizing all CCTV inspection results will be prepared later this year, (after the Buck Lake sewer project), complete with cost estimates to repair significant defects.

Wastewater Projects - 2017 Capital Plan

Phase 2 Wastewater Infrastructure Upgrades – Public Consultation

 No change since last meeting. Still planning to complete conceptual design upgrades, cost estimates, and financial impacts to present at an open house later this year. The focus right now is on the Buck Lake Sewer project and I&I report.

Wastewater Projects – 2018 Capital Plan

No projects in 2018 due to insufficient capital reserve funds. Projects are being planned in future years subject to a successful referendum in 2019 to enable borrowing.

Report Prepared by: Malcolm Cowley



May 8, 2018

File: 0360-20

Magic Lake Estates Water and Sewer Committee

Magic Lake Estates Water and Sewer Committee

OPERATIONS REPORT

Water Operations Highlights:

- Responded to a report of an oil slick observed on Buck Lake. After a sight investigation there was no evidence found to support this claim.
- Repairs to control valve relay switch that operates the air saturator water processing equipment.
- Buck Lake raw water pump station potassium permanganate chemical injection pump failure and repairs.

Wastewater Operations Highlights:

- Emergency response to overflow conditions of the Schooner Wastewater Treatment Facility oxidation ditch.
- Operating Permit Regulatory Non-compliance reporting for April 2018:

Facility	# of Reports Issued for April	Total # of Reports Issued 2018	Total # of Reports Issued 2017	Cause	
Schooner WWTP	0	5	16	Events due to UV failure (effluent disinfection system) as a result of power outages (typically) and one event due to exceeding maximum daily flows (I&I).	
Schooner Pump Station	0	0	3	Typically these are overflow events into the marine environment (Boat Nook) due to extended power failures in the area.	
Cannon WWTP	1	23	33	Exceeding maximum daily flows due to storm water entering through I&I.	

Capital Improvement work:

Nothing to report this period.

Prepared by: Dan Robson, and Matt McCrank, Integrated Water Services



REPORT TO MAGIC LAKE ESTATES WATER AND SEWER COMMITTEE MEETING OF TUESDAY, MAY 8, 2018

SUBJECT AMENDMENT OF BYLAW NO. 1990 TO INCLUDE ONE PROPERTY (2614 CHART DRIVE) INTO THE SEWER SERVICE AREA

ISSUE

To amend the Magic Lake Estates Sewer System Specified Area Establishment Bylaw to include one property at 2614 Chart Drive.

BACKGROUND

At its meeting of November 14, 2017, the Magic Lake Estates Water and Sewer Committee (MLEWSC) approved in principle, the inclusion of the property at 2614 Chart Drive into the Sewer Service Area subject to the property owner meeting the conditions as resolved by the MLEWSC at the November 14, 2017 meeting (**Attachment 1**).

The legal description of the proposed property is:

Lot 68, Section 9, Pender Island, Cowichan District, Plan VIP22335.

Since November 14, 2017, the property owner, has made progress on a number of conditions including providing a \$500 deposit for commencing with the amendment process.

In order to include the property into the sewer service area, Bylaw No. 4238, "A Bylaw to Amend the Outer Gulf Islands Magic Lake Estates Sewage System Local Service Establishment Bylaw, 1990" has been prepared (**Attachment 2**) for the MLEWSC's consideration.

ALTERNATIVES

Alternative 1

THAT the Magic Lake Estates Water and Sewer Local Services Committee recommend to the Electoral Area Services Committee and recommend to the Regional Board that:

Bylaw No. 4238, "Outer Gulf Islands Magic Lake Estates Sewerage System Local Service Establishment Bylaw, 1990, Amendment Bylaw No.1, 2018" be introduced and given first and second reading;

Bylaw No. 4238, "Outer Gulf Islands Magic Lake Estates Sewerage System Local Service Establishment Bylaw, 1990, Amendment Bylaw No.1, 2018" be given third reading.

Alternative 2

That the Magic Lake Estates Water and Sewer Local Services Committee request additional information.

IMPLICATIONS

Alternative 1 – In order to allow the property at 2614 Chart Drive into the service area, the bylaw amendment must be approved by the MLEWSC and be forwarded to the EASC and CRD Board. After third reading of the bylaw, it will then be sent to the Inspector of Municipalities for approval. After the Inspector of Municipalities approves the bylaw it will be returned back to the CRD Board for final adoption. The inclusion of the property in the service area will benefit the existing participants as additional user fees and parcel taxation can then be collected.

Alternative 2 - Staff can present a subsequent staff report to address any requests for additional information.

CONCLUSION

The proposed property at 2614 Chart Drive is outside, but adjacent to the Magic Lake Estates Sewer Service Area (right across the road from Chart Pump Station). The inclusion of the property in the service area will benefit the existing participants as additional user fees and parcel taxation could then be collected. The inclusion will not adversely impact the existing participants in the sewer service in the short-term, and in the long-term improvements are required to the system to lower inflow and infiltration and increase treatment capacity for all users. The property is currently within the water service area and subject to all applicable user fees for that service.

The Magic Lake Estates Sewer Local Service establishing bylaw must be amended to include the proposed property into the service area to enable the sewer service to be provided.

RECOMMENDATION

THAT the Magic Lake Estates Water and Sewer Local Services Committee recommend to the Electoral Area Services Committee and recommend to the Capital Regional District Board that:

Bylaw No. 4238, "Outer Gulf Islands Magic Lake Estates Sewerage System Local Service Establishment Bylaw, 1990, Amendment Bylaw No.1, 2018" be introduced and given first and second reading;

Bylaw No. 4238, "Outer Gulf Islands Magic Lake Estates Sewerage System Local Service Establishment Bylaw, 1990, Amendment Bylaw No.1, 2018" be given third reading.

Submitted by:	Malcolm Cowley, P.Eng., Manager, Wastewater Engineering and Planning
Concurrence:	lan Jesney, P.Eng., Senior Manager, Infrastructure Engineering
Concurrence:	Ted Robbins, BSc, C Tech, General Manager, Integrated Water Services
Concurrence:	Kristen Morley, General Manager, Corporate Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

MC:Is

Attachments: 2



REPORT TO MAGIC LAKE ESTATES WATER AND SEWER COMMITTEE MEETING OF TUESDAY, NOVEMBER 14, 2017

SUBJECT REQUEST FOR SEWER SERVICE AREA INCLUSION – 2614 CHART DRIVE

ISSUE

A request for inclusion into the Magic Lake Estates sewer service area is brought forward for consideration by the Magic Lake Estates Water and Sewer Committee (MLEWSC).

BACKGROUND

A request to be included in the Magic Lake Estates sewer service area was received from the property owner located at 2614 Chart Drive. See **Attachment 1** for location of the subject property and **Attachment 2** for a copy of the property owner's request letter.

On August 9, 2017 the Capital Regional District (CRD) received further details on the proposed house plans and fixture units that would be connected to the sewer system and the CRD has received a \$500 deposit from the homeowners to pay for staff time to evaluate their request and present a report to the Committee.

Based on the information provided, the average daily wastewater flow from a typical residence of this size is about 1,363 L/day (based on the Province of BC Sewerage System Practice Manual).

Capacity Analysis of the Current Sewer System

The existing sewer system has not been hydraulically modelled, which is recommended to better evaluate the system under various operational scenarios and future flow projections. A model could be undertaken as part of the inflow and infiltration project if there is sufficient budget.

Meanwhile, theoretical calculations have been completed to estimate the capacity of the system and any potential impacts from expanding the service area to include one house at 2614 Chart Drive. The analysis indicates that the wastewater system can accommodate an additional 1,363 L/day. The committee is aware, however, that during wet weather events, the inflow and infiltration (I&I) that leaks into the system can exceed the capacity of the Schooner wastewater treatment plant (WWTP). The current I&I program is investigating where I&I may be leaking into the system and conceptual plans will be prepared to lower I&I as well as increase the capacity and ability of Schooner WWTP to handle wet weather flows and a larger service area. Further information on the conceptual plans will be provided to the Committee in the coming months.

Meanwhile, as noted above, an additional flow of 1,363 L/day it is not anticipated to create any problems for the wastewater system.

Therefore, the committee may consider a sewer service establishment area revision subject to the following conditions:

1. The property owner provides details of the proposed sewer system on his property and proposed connection to the CRD wastewater system.

- 2. That the proposed sewer system complies with all relevant bylaws and applicable codes for servicing (land use, building code, MoTl approval, etc.)
- 3. That the MLEWSC approve a revision to the existing sewer service area to include the property at 2614 Chart Drive
- 4. That the applicant pays all applicable fees for amending the service area (bylaws, sewer application, connection fees, etc.) including parcel taxes and/or user fees as required.

ALTERNATIVES

Alternative 1

That the Magic Lake Estates Water and Sewer Committee <u>approve in principle</u> the request for inclusion of the property at 2614 Chart Drive in the Magic Lake Estates sewer service area <u>subject to</u> the property owner meeting the four conditions as noted above within this November 14, 2017 staff report.

Alternative 2

That the Magic Lake Estates Water and Sewer Committee receive this report for information and request that the CRD staff provide further information at a future meeting.

IMPLICATIONS

Alternative 1 – There are no direct cost implications to the sewer service for this alternative since the property owner will pay all costs and fees to amend the service area and connect to the system. However, once connected, the collection system will have to convey and treat wastewater flow received from this property, but the property owner will pay an annual fee for this service through parcel taxes and user fees (proposed to be \$750.36 and \$300.41 in 2018, respectively). If approved, staff will prepare a sewer service extension letter to the property owner to inform them of the next steps and costs to join the service. Staff will also prepare an amendment to the sewer service establishment bylaw to include the property at 2614 Chart Drive.

Alternative 2- By receiving this report and requesting further information CRD staff will prepare supplementary information for the Committee's consideration at a future meeting.

CONCLUSION

In conclusion, a request for inclusion in the Magic Lake Estates sewer service area was received from a property owner for their property at 2614 Chart Drive.

The property is adjacent to the new Chart Drive wastewater pump station, but is not included in the existing sewer service area and therefore, it is not currently eligible for sewer service. However, the sewer service area boundary can be extended to include the property at 2614 Chart Drive if the property owner meets the stated conditions and the Committee approves the bylaw to extend the service area and forwards it to the CRD Board for adoption.

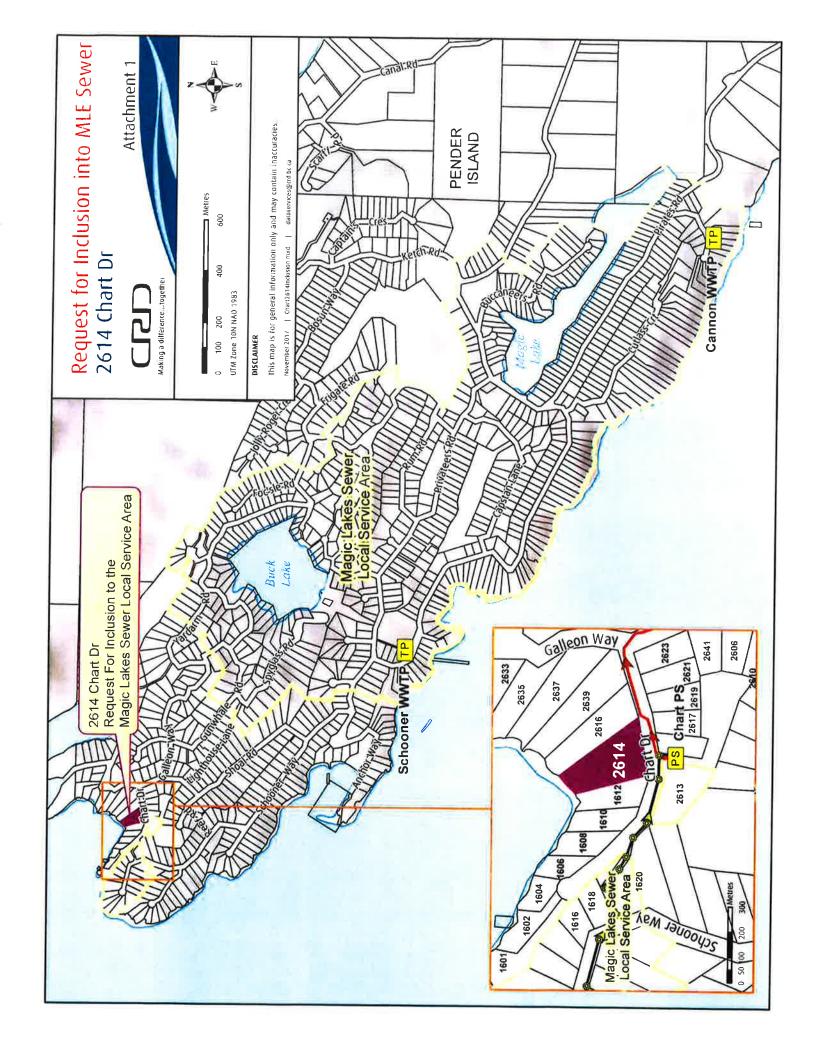
RECOMMENDATION

That the Magic Lake Estates Water and Sewer Committee <u>approve in principle</u> the request for inclusion of the property at 2614 Chart Drive in the Magic Lake Estates sewer service area <u>subject to</u> the property owner meeting the four conditions as noted above within this November 14, 2017 staff report.

Submitted by:	Malcolm Cowley, P.Eng. Manager, Wastewater Engineering and Planning			
Concurrence:	lan Jesney, P.Eng., Senior Manager, Infrastructure Engineering Services			
Concurrence:	Ted Robbins, BSc, C Tech, General Manager, Integrated Water Services			

MC:so

Attachments: 2



Capital Regional District Integrated Water Services 479 Island Highway Victoria, BC V9B 1H7

Attn: Derek Arthur
Engineering Technologist, Development

Dear Derek,

Thank you for your help in our request to connect our Pender Island property, 2814 Chart Drive, to the Magic Lake Sewer System.

We understand that our property is currently outside the Magic Lake Estates (MLE) Sewer Service Area and this letter details our request to be included in the service area.

As it stands today, our property is directly across the street from the new MLE sewer infrastructure.

We understand that we are to pay for the CRD's this and effort to administrate the inclusion process and to construct the sewer connection should the inclusion be successful.

We understand that our property will likely need a pump station and sanitary forcemain on private property and that all costs for design, appropriate and construction are our responsibility.

We hope the MLE Sewer Commission will consider and grant our application at their next meeting on 11 April 2017.

If you have any questions, please do not hesitate to reach out to us over email at ptfrohilch@gmail.com or via phone on 604 970 9881.

With thanks.

Tom Frohlich ptfrohlich@gmail.com 604 970 9881

CAPITAL REGIONAL DISTRICT BYLAW NO. 4238

			*******	******	***************	*********		
AE	BYLAW TO AMEND THE OUT SYSTEM LOCAL SI					SEWAGE		
*****	***********	******	*****	*****	*********	*******		
The Bo	ard of the Capital Regional Dis	trict in ope	en meetir	ng asser	mbled, enacts as foll	ows:		
1)	Bylaw No. 1873, "Outer Gulf Islands Magic Lake Estates Sewage System Local S Establishment Bylaw, 1990" is hereby amended as follows:							
	 (a) By deleting Schedule "A" and substituting therefore the attached amendor Schedule "A", which includes, LOT 68, SECTION 9, PENDER ISLAN COWICHAN DISTRICT, PLAN VIP22335; (b) By deleting Schedule "B"; (c) By amending section 2 to read as follows: 							
		outline on	Schedul	le "A" to	ea established in S this bylaw and shall vice Area".			
2)	This Bylaw may be cited for a Sewage System Local Servi 2018".	all purpos ce Establ	es as the ishment	e "Outer Bylaw,	Gulf Islands Magic 1990, Amendment	Lake Estates Bylaw No. 1,		
READ .	A FIRST TIME THIS	-	day of		·	2018		
READ A SECOND TIME THIS		-	day of		(2018		
READ A THIRD TIME THIS			day of		:	2018		
APPROVED BY THE INSPECTOR OF MUNICIPALITIES THIS		-	day of		Q	2018		
SOUTH	ENTED TO BY THE DIRECTO HERN GULF ISLANDS ORAL AREA THIS.	R OF THE	day of		a	2018		
ADOPT	FED THIS	-	day of			2018		
CHAIR				CORPO	ORATE OFFICER			
FILED	WITH THE INSPECTOR OF M	IUNICIPA	LITIES T	HIS	day of	2018		

