



THE MUNICIPALITY OF THE VILLAGE OF LIONS BAY

**INFRASTRUCTURE COMMITTEE MEETING
OF THE VILLAGE OF LIONS BAY
HELD ON MONDAY, MARCH 27, 2017 at 7:00 PM
COUNCIL CHAMBERS, 400 CENTRE ROAD, LIONS BAY**

AGENDA

- 1. Call to Order**
- 2. Appointment of Recorder**
- 3. Approval of the Agenda**
- 4. Public Questions & Comments**
- 5. Approval of Minutes**
 - A. Infrastructure Committee Meeting – February 27, 2017
 - B. Action Items from the Minutes
- 6. Business Arising from the Minutes**
- 7. Unfinished Business**
 - A. UBC Water Hydrology Project Update – Progress Update
 - B. Metro Vancouver Water – Proposal Revisited
 - C. Howe Sound Water Source Matrix – Update and Information (Page 7)
 - D. Cell Towers – Update
 - E. Bayview Road Work – Update
- 8. New Business**
 - A. Clean Water and Wastewater Fund (CWWF) Grant – Reporting Out
- 9. Public Questions & Comments**
- 10. Adjournment**

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**LIONS BAY INFRASTRUCTURE COMMITTEE MEETING
MONDAY 27 FEBRUARY 2017 AT 7:00 PM
IN COUNCIL CHAMBERS, LIONS BAY COMMUNITY CENTER**

MINUTES OF THE MEETING

In Attendance:

Fred Bain – Councilor and Committee Chair
Naizam Jaffer – Public Works Manager
Jim Mutrie - Resident
Brian Ulrich – Resident

Regrets:

Jim Hughes – Councilor
Peter Dejong - CAO
Karl Buhr – Mayor
Tony Greville – Resident

1. Call to Order

Meeting was called to order at 7:04 pm.

2. Appointment of Recorder

Regular recorder: Brian Ulrich

3. Approval of the Agenda

The Agenda was approved as tabled, with the following additions:

- 7. D. Further discussion on wells
- 8. A. Cell towers
- 8. B. Update on Bayview Road work.

4. Public Participation

No public questions or comments

5. Approval of Minutes

A. Correction to 16 January 2017 IC meeting minutes:

Remove last paragraph of Section 8.B. This is unrelated text left over from previous meeting minutes.

B. Action items from 16 Jan 2017 minutes.

From Section 6:

- Karl to find out what each Howe Sound community uses for water supply.
In Progress. Brian did some research and tabled a list of each Howe Sound community between Horseshoe Bay and Pemberton with a description of the water source used by each community. Several details still need to be filled in but the picture that emerges is that these communities use wells as much as surface (creeks) for their potable water.
- All members to ask around to see if anyone knows if there is an existing well somewhere in the village or environs.
Done. No existing wells have been identified in the Village.

From Section 8:

- Nai to take Derek up to the intakes so he can assess the scenarios and give us a quote on a pulley camera system.
Done. Derek provided a quote on a pulley cam system of \$10,400 for both creeks. The proposed system uses a drill to drive the camera up and down the line. It has a pre-programmed scan routine so we cannot view the coverage live or change the view angle on demand. Live viewing is possible at additional cost.

The IC was pleasantly surprised by the quote and would like to see one of these systems in action to get an appreciation of operation and performance. Are there any YouTube videos available?

ACTION: Nai to see if we can obtain coverage from a cable cam system in action.

- Peter to approach Metro Vancouver regarding feasibility and cost of a water pipeline to Lions Bay.
Done. Karl attended a Metro Vancouver Water District meeting to present our request, and the request for quote was turned down. Karl believes that the request was mis-interpreted and feels that we would have had a more positive response if he had approached it differently. We believe they thought we were asking them to pay for a feasibility study rather than simply lift data from their own information. The IC discussed the options at this point, the main ones being a) let the dust settle a bit and go back to re-submit our request, or b) do the estimate ourselves.

All the information required must come from Metro anyway so there is no point in us paying an engineer to do it for us versus doing it ourselves. Nai indicated that typical costs for a water pipeline are in the order of \$700 to \$1000 per meter. Whoever does such a feasibility study must consider using the railway right of way as one of the options.

We felt that we should take another kick at the can and at least make sure our request is properly understood.

ACTION: Nai to do some research into who to talk with at Metro to resurrect the initiative.

Recommendation: The IC recommends that Council continue pursuing Metro to do an internal feasibility study on this.

6. Business Arising from the Minutes

None.

7. Unfinished Business

- A. UBC Water Hydrology Project. The update from Karl was that UBC felt the MOU was too detailed. We indicated to them that we disagreed, and they backed off on that position. The next step is for UBC to complete and execute the MOU.
- B. Request to Metro Water District - update provided in previous section.
- C. Intake Drone – update provided in previous section.
- D. Wells. Discussion of the water source matrix provided by Brian. Of the 7 communities using wells, there is only one so far identified has having significant levels of arsenic which must be removed by treatment. None of the others have any significant levels of arsenic in their water. We were under the understanding that arsenic in our water was one of the main reasons we have no wells in Lions Bay. Further data on the other wells is pending, however this is more encouraging than we expected for the possibility of Lions Bay using a well or wells to augment our supply, especially in dry seasons.

Karl asked if wells were affected by septic plumes. This is added to the list of additional information to be researched and added to our water source matrix.

ACTION: all to add more details to the water source matrix where data is missing.

If we were to pursue wells in the village, we would expect that one of the deliverables from the UBC Hydrology study would be recommendations as to where we should drill wells.

8. New Business

- A. Cell Towers for SCADA

Nai has been in contact with cell phone tower companies as part of the ongoing SCADA study. Since cell coverage in the village is less than satisfactory, particularly for the SCADA system, an additional tower(s) is an option for improving cellular signal here. Public works would want space on that tower for our SCADA connection needs and the residents would benefit from it overall.

The question was raised as to what would be the appetite of the residents (or backlash) for a cell tower in the village.

We can recommend potential locations on village land (e.g. Harvey tank, gravel pit, Tank 4&5, Fire hall etc.), and the tower companies would assess if the locations would work for us (line of sight is important).

Recommendation: The IC recommends that Council issue an RFP to erect a cell phone tower somewhere in the village to improve general cell phone coverage and provide adequate connectivity to the water intakes for SCADA.

B. Bayview Road update

Nai provided an update on the Meeting with ISL on the progress. Preliminary drawings of the road cross section with subsurface drainage. The next set of drawings will include storm water and road profile with sidewalks.

Pricing is to come.

This design will be done by the summer and will give us our shovel ready design required to apply for outside funding.

9. Next Meeting

The next meeting will be Monday 27 March 2017 at 7:00 pm.

10. Public Questions and Comments

It was requested that author and date be added to the water source Matrix. (i.e. Brian Ulrich – 27 February 2017)

11. Adjournment

Meeting was adjourned at 8:25 pm.

Howe Sound Community Water Sources
Brian Ulrich - 27 Feb 2017

Community	Water source	Filtration	Treatment System	Notes	Information Source
Ansel Place	West Vancouver Distribution				[REDACTED]
SeaScapes	3 deep wells feeding tanks	Filters to remove Arsenic	Chlorine	Arsenic in water	[REDACTED]
Montizambert	Surface from Montizambert Creek (without permit)		Off-the Shelf Chlorine treatment plant		[REDACTED]
Strachen Point Road	Small shallow well - mostly influenced by Charles Creek	No	Chlorine		[REDACTED]
Ocean Point Drive	Surface from Newman Creek	No	Chlorine only - upgrading to filters & UV this summer		[REDACTED]
Lions Bay	Surface from Harvey & Magnesia Creeks feeding Tanks	No	UV & Chlorine at each intake		Public works & village Doc's
Porteau Cove					
Furry Creek	One well for residences (40 meters penetrates barrier). One well for golf course. No reservoir tanks (booster pumps)	no	Chlorination - injection pumps for residual only.	They have a water license and will be going to surface water for build-out. No arsenic in water	[REDACTED]
Britania Beach	2 active of 6 existing wells. Shallow (20m) wells influenced by surface water. 10 monitoring wells. Two reservoir tanks 170,000 gal (upper) & 205,000 gal (lower)	Yes	Settling ponds with UV and Chlorination. Treated for PH and corrosion.	No arsenic in the water (wells are on north side of creek, away from contaminated area.	[REDACTED]
Squamish					[REDACTED]
Whistler	Wells & surface				[REDACTED]
Pemberton	Wells & surface			Deep municipal wells have no arsenic. Shallow residential wells have arsenic.	[REDACTED]
Bowen Island	all wells				
Boyer Island					

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