



TOWN OF LAKE COWICHAN

Public Works and Environmental Services Committee
Tuesday, November 7th, 2017 at 5:00 p.m. – Council Chambers

AGENDA

- | | |
|---|---------------|
| 1. CALL TO ORDER | Page # |
| INTRODUCTION OF LATE ITEMS (if applicable) | |
| 2. APPROVAL OF AGENDA | |
| 3. BUSINESS ARISING AND UNFINISHED BUSINESS | |
| (a) Watermain Upgrades for: | |
| (i) Greendale Rd – update; and | |
| (ii) Ohtaki Footbridge and Greendale Trestle- status. | |
| (b) Water Treatment Plant Upgrade – progress report. | |
| (c) Water main upgrades - Costing estimate report. | 3 |
| (e) Planned BC Hydro power outage December 7 th , 2017. | |
| (f) Ongoing Items Still Being Addressed: | |
| (i) Boat Ramp Improvements – progress update; and | |
| (ii) CLEC Water System Upgrades. | |
| 4. DELEGATIONS AND REPRESENTATIONS | |
| None. | |
| 5. CORRESPONDENCE | |
| (a) Glenda Osbourne-Burg, Gerard's Specialty Foods Ltd, re: Speeding Through School Zone. | 6 |
| 6. REPORTS | |
| 7. NEW BUSINESS | |
| (a) Crosswalk on King George St by Business Area. | |
| (b) Unsecured Garbage Receptacles on Private Property or at Curbside 24/7. | |
| (c) Sidewalk Upgrades for 2018 and Beyond. | |
| 8. NOTICES OF MOTION | |
| 9. PUBLIC RELATIONS ITEMS | |
| 10. MEDIA/PUBLIC QUESTION PERIOD | |
| 11. ADJOURNMENT | |

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October 26, 2017

Nagi Rizk, P.Eng.
Town of Lake Cowichan
39 South Shore Road
Lake Cowichan, BC
V0R 2G0



Dear Mr. Rizk:

RE: Town of Lake Cowichan 2018 Water Main Upgrades – Arbutus Street and MacDonald Road

This letter outlines cost estimates prepared for water main upgrades for *Arbutus Street (between Alder Street and Larch Street) and MacDonald Road (north of Cowichan Lake Road to the end of existing main)*.

These upgrades are required to replace old and undersized water mains and to provide adequate fire flow and safe drinking water to the residents in these areas.

Background

The Town of Lake Cowichan (Town) is located approximately 25 km west of Duncan at the eastern end of Cowichan Lake on Vancouver Island, British Columbia. In 2016, the date of the most recent census, the Town had a population of 3,015. The Town draws water directly from Cowichan Lake through a triplex pump station located on North Shore Road. Disinfection occurs at the pump station. Water is pumped directly to a storage reservoir on Indian Road, which contains an active volume of 5,400 m³. From the reservoir, water is distributed to the Town.

In 2012, the Town installed water meters for all residential and most of the commercial properties. The Town charges for water using bulk rates depending upon land use up to a cap. For water use beyond the cap, a flat rate of \$0.49/m³ is charged. Since installation of the meters in 2012, total annual water demand has been reduced from 899,270 m³ in 2010 to 640,140 m³ in 2014. The average daily demand (ADD) per capita in 2014 was 580 Liters.

Project Purpose

Water distribution system modelling has been carried out and has identified several locations where the existing system is undersized to support the required fire flows while maintaining adequate pressures in the system. The purpose of the proposed upgrades on Arbutus Street and MacDonald Road is to increase capacity in these areas to maintain adequate system pressures and to upgrade pipes that are near the end of their service life. Although the water metering program in the Town has been successful at reducing water demand, breaks and leakage are still resulting in increased water demand. On-going replacement of aging infrastructure will help

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reduce overall demand through a reduction in system water losses. Making improvements to substandard system components is an immediate priority for the Town as this will help to ensure the delivery of safe, potable water. The use of new pipe materials and fittings will not only eliminate the risk of contamination but will eliminate existing leaks that cause an unnecessary waste of valuable treated water.

In summary, the proposed upgrades on Arbutus Street and MacDonald Road are required to protect the water supply from contamination, provide adequate pressures and fire flows to protect life and property, and to replace aging infrastructure to reduce potential leakage.

Water Main Upgrade Project Descriptions

The project involves replacement of water mains in two distinct areas:

1. Arbutus Street (between Alder Street and Larch Street) – 364 linear meters of 150 mm diameter water main to replace the existing undersized 100 mm water main.
2. MacDonald Road (north of Cowichan Lake Road to the end of existing main) – 431 linear meters of 150 mm diameter water main to replace the existing undersized 100 mm water main.

Water Main Upgrade Costs

Cost estimates for installation of new water mains have been prepared based on quantities and unit rates from similar past projects. Costs provided are considered to be adequate for budgeting purposes and include a 15% contingency. The budget has been separated to show costs associated with water main upgrades and other costs for road and site improvements. A summary of the cost estimates for each project is included in **Table 1**.

Table 1: Water Main Upgrade Cost Estimates (Class D)

Project	Water Main Upgrade Cost	Road and Site Improvements	Contingency (15%)	Engineering/Environmental (10%)	Total Budget
Arbutus Street	\$64,064	\$197,652	\$39,258	\$30,098	\$331,072
MacDonald Road	\$75,856	\$234,033	\$46,484	\$35,638	\$392,011
Total	\$139,920	\$431,685	\$85,742	\$65,736	\$723,083

The provided cost estimates include pipe installation cost, road work restoration, service connections, contingency (15%) and engineering (10%).



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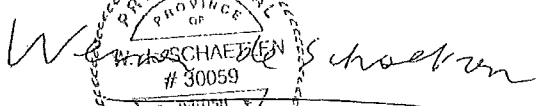

Closing

If you have any questions or require clarification of the cost estimates outlined above, please contact the undersigned by email at werner@geoadvice.com, or by phone at 604.931.0550.

We appreciate the opportunity to work with the Town on this important project.

Yours Truly,

GeoAdvice Engineering Inc.

  Oct 26, 2017

Werner de Schaetzen, Ph.D., P.Eng.
President and Chief Executive Officer





P.O. Box 1734, Lake Cowichan, B.C. V0R 2G0
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October 12, 2017

His Worship Mayor Ross Forrest and Council
Town of Lake Cowichan

Dear Mayor Forrest and Councillors:

We are writing to express our concern with the serious problem of speeders through the school zone along South Shore Road at the Lake Cowichan Senior Secondary School.

Our company is located directly across the street from the school, at 205 South Shore Road, so we have always been aware of high speed traffic, but this summer we really had a 'front row seat' to this problem, while operating our Take-Out. The traffic passes right in front of us, which is great for our business, but it also gave us 'heart-failure' at some of the extreme speeds through a school zone. Sixty, seventy and even eighty kilometers is not unusual!


Drivers start to accelerate as they round the curve at South Shore Cabinetry and continue increasing speed until they reach the corner at the top of the hill toward Honeymoon Bay, where they brake, squeal tires and even drift over the yellow line. Coming from Honeymoon Bay, they roar down the hill and continue at high speed as they pass the high school.

While we are aware, the Town has limited authority with this problem, we are also sure that you can use your influence to improve this serious problem, which concerns the safety of children.

So many times in our society, we take a *reactive* approach to situations; taking action after a problem occurs. Why not take a *proactive* approach here....taking action before a tragedy happens. You have this opportunity.

Yours truly,

GERARD'S SPECIALTY FOODS LTD.


Glenda Osborne-Burg
Manager