



# Memo

**TO: Chief Administrative Officer**

**SUBJECT: Town Water Main Supply Line Issues and Upgrade Requirements**

**DATE: November 22, 2022**

**FROM: Superintendent, Public Works and Engineering Services**

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As you know the Town requires a water model done for each new subdivision or development within our Town boundary. The Town has been using Geo Advice for years.

Each of the sites they have done a water model for have varied depending on what part of town the development is in. Geo-Advice's findings are as follows:

- Increase pipe diameter in certain areas.
- Install a new booster station.
- Upgrade a booster station.

The common factor in all the water models is that the main water supply line from the reservoir into the Town is not large enough. This is the Indian and River Road water main that feeds the whole Town. The more units we add to the system the worse it gets.

We do have a few options:

1. Increase the diameter size of the existing main.
2. Twin the existing line down Indian and River Road.
3. Twin the supply line into Town by going down the Youbou highway hooking in Beaver and Elk Road, the Slopes, McDonald Road, Neva Road and possibly to the Intersection of Town.

We will need to have an Engineer look at this soon and come up with a design and a cost estimate.

Some preliminary costs are: \$2,200,000 to \$3,500,000.

As we have a clause in all the subdivision permits to construct depending on the water model findings there may be some upgrades or fees charged.

I have notified all the Engineers of any current construction projects of the water modelling findings and that there will be additional fees charged for the Indian and River Road upgrades that are required due to their developments.

**Recommendations:**

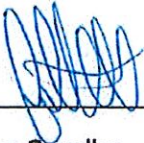
**All new Developments should be charged an upgrade fee.**

I recommend that the Town immediately charge all developments, for newly developed lots or multi-family units a fee of \$1200.00 per unit. These fees would then be used towards the upgrades to the water supply main.

These fees were arrived by taking a construction value of \$2,500,000.00 and applying 5%. With approximately 110 units to be added to the system by mid 2023 this would add \$132,000.00 to the Town water fund. This will allow the Town to hire an engineering firm to review, design and provide a cost budget for these upgrades. Once we have this in place the Town can begin plans for funding the remaining 95 percent cost for the project.

Superintendent

Public Works & Engineering Services



Jas Sandhu

**Comments from the CAO**

The construction value, as above estimated, needs to be ascertained through estimates from a qualified engineering consultant. Council needs to be aware that additional costs relating to design work and oversight of the construction project need to be included in the total costing of the project.

Once the estimates are determined, these could be included in the financial plan and we would also be better prepared to make an infrastructure grant application.

**RECOMMENDATION**

The Committee of the Whole needs to recommend authorization of a proposal call that would be issued to qualified engineering consultants for evaluating and analysing the optimum upgrades required for the watermain feed from our Water Treatment Plant and for providing the required detailed cost estimates.



Joseph A. Fernandez