



## STAFF REPORT TO COUNCIL

Council Meeting: MAY 25, 2021

500 Matterson Drive, Ucluelet, BC V0R 3A0

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**FROM:** RICK GEDDES, FIRE CHIEF

**FILE NO:** 7380-20

**SUBJECT:** 4-STOREY BUILDINGS & AERIAL FIRE APPARATUS

**REPORT NO:** 21-84

**ATTACHMENT(S):** NONE

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### **RECOMMENDATIONS:**

**THAT** Council receives this report for information.

### **SUMMARY OF CONCLUSIONS:**

An aerial apparatus (a.k.a. ladder truck) is not automatically required in a community prior to approving 4-storey buildings. The BC Building Code does require that all new 4-storey buildings have an approved fire suppression sprinkler system. The ability for the District to require fire sprinklers in buildings less than 4 stories is limited by provincial legislation.

Given the number of larger existing 3- and 4-storey buildings in town, the Fire Underwriters Survey guidance suggests that the District of Ucluelet Fire Department could benefit from an aerial apparatus. Adding that piece of equipment, however, would have considerable implications for initial and ongoing fleet and building costs, plus training requirements for fire department members. Detailed analysis of the pros and cons of acquiring such equipment is not the subject of this report.

The District of Ucluelet will maximize its ability to maintain public safety in new developments by providing clear direction on the maximum allowable size of buildings, based on the District's fire suppression capabilities.

### **BACKGROUND:**

Comments from the public on development proposals have, more than once, raised a question of whether the District is required to have a ladder truck before it can approve any more buildings over 3 stories in height. This report aims at informing any discussion on this topic.

### **DISCUSSION:**

As development progresses within the District of Ucluelet, so do the challenges with the ability of the District of Ucluelet Fire Department to maintain acceptable levels of life safety and fire suppression. Life safety must be a priority in planning future development within the municipality.

Large developments pose unique challenges related to the fire department. Some of these challenges include longer egress times and distances, complex evacuation strategies, fire department accessibility, as well as fire suppression capabilities (or limitations) of the fire department.

With these challenges in mind, it is vital that the District of Ucluelet provide clear, consistent messaging to developers on expectations and requirements, prior to decisions on rezoning applications or the issuance of future development and/or building permits.

#### Building Code and Fire Underwriters:

The BC Building Code (2018) establishes the requirements for fire and life safety protection in all new construction based on several factors. Two of the main factors are the size of the building and its use (occupancy type). The building code does not limit the amount or size of buildings that are built in a given municipality. The responsibility for controlling the maximum size of building to be permitted in a municipality rests with local government. Fire insurance grades are a comparative measure of a community's fire risk versus the fire protection capacity of the fire department.

As a general rule, three-story residential construction does not require sprinklers. Four-story residential buildings are required to be sprinklered by the BC Building Code.

Through Section 5 of the *Building Act*, local governments are restricted from regulating technical matters that are regulated by the BC Building Code. Some municipalities (approximately 30) in BC had previously been allowed to exceed the BC Building Code and require all new construction to be sprinklered. The jurisdictions that had existing sprinkler bylaws under the previous Provincial government were permitted to retain them. The Ministry of Attorney General and Minister Responsible for Housing has not been able to provide clear direction on whether additional community access to enhanced fire sprinkler regulations will be possible.

At the present, Ucluelet is on the cusp of needing to seriously consider expanding its fleet to include an aerial fire apparatus, according to Fire Underwriters Survey (FUS). FUS is a national organization that provides data on public fire protection for fire insurance statistical work and underwriting purposes of subscribing insurance companies. FUS assigns a residential and commercial insurance for communities. Insurance rates are then calculated using those rates.

We are at a point in time where the District should consider limiting the risk associated with larger, more complex buildings by restricting the height and overall area of buildings (through potential changes within the Zoning regulations), or plan for the purchase of an aerial apparatus in the near future. Besides potentially rescuing people above the reach of ground ladders, aerial apparatus provide elevated fire suppression streams, horizontal reach to buildings where road access and terrain create problems, special rescue scenarios, safer operations at chimney fires, and roof access when adequate personnel are not available to hoist ground ladders. A local example of where an aerial apparatus would be beneficial is a large un-sprinklered building such as the Ucluelet Harbour Seafoods plant.

Some other ways that the District can improve life safety in new construction is to encourage the use of fire resistant or non-combustible exterior cladding on buildings and promote FireSmart principles. Fire Sprinklers are also one of the biggest ways we can increase building safety and our firefighting capacity - and thus improve public safety (by minimizing the risk).

**FINANCIAL IMPACTS:**

Nanaimo Fire Rescue recently purchased an aerial truck for \$1.56 million. In addition, the existing District of Ucluelet Fire Hall would not accommodate this type of addition to the vehicle fleet and therefore would require significant renovations. On an ongoing basis, the purchase of an aerial apparatus comes with other large commitments such as initial and ongoing training of our firefighters. Safe operation of aerial firefighting apparatus requires very specialized training.

At a some point the District of Ucluelet will need to seriously consider and prepare to purchase an aerial apparatus. This is recognized as a significant undertaking for a small community and will need to be planned well in advance. The Fire Chief is not advocating for an aerial apparatus at this time. District staff are recommending that we maintain and continue to improve on our capacity to provide a safe community for residents and visitors alike.

The purchase of an aerial apparatus, and/or expansion of the fire hall, does not currently appear in the municipal five-year financial plan.

**CONCLUSION:**

An aerial apparatus (a.k.a. ladder truck) is not automatically required in a community prior to approving 4-storey buildings. The BC Building Code does require that all new 4-storey buildings have an approved fire suppression sprinkler system. The ability for the District to require fire sprinklers in buildings less than 4 stories is limited by provincial legislation.

Given the number of larger existing 3- and 4-storey buildings in town, the Fire Underwriters Survey guidance suggests that the Ucluelet Fire Department could benefit from an aerial apparatus. Adding that piece of equipment, however, would have considerable implications for initial and ongoing fleet and building costs, plus training requirements for fire department members.

**Respectfully submitted:** Rick Geddes, Fire Chief  
Bruce Greig, Manager of Community Planning  
Donna Monteith, Director of Finance