

To: Dawn Galusha
From: Tyler Moffitt, Fire Chief/CEMC
Date: January 14, 2021
Subject: Request for Proposal: Replacement of 1988 Aerial Ladder Truck (11-3)

Background

To maximize fire fighter capabilities and minimize risk of injuries, it is important that fire apparatus be equipped with the latest safety features and operating capabilities.

The Town of Fort Frances **1988 Aerial Ladder Fire Truck (11-3) is 33 years old.**

As well, some of the main points to bring forward along with its age are as follows:

- It is not NFPA (National Fire Protection Association) compliant.
- With respect to Fire Underwriters Survey Grading, it has received zero points over the course of the last 8 years.
- We cannot transport passengers in the back-seating area because it is open and not enclosed.
- It has a 1050 GPM Pump. New apparatus would have a 1250 GPM Pump; we need this extra pumping capacity due to the fire load at structure fires and train derailments.
- The ladder railing is not wide enough for a modern stokes basket, the railings height is shorter than what NFPA standards require, as well as there is no lighting along the length of the ladder for night-time operations if firefighters need to ascend and descend the ladder.
- Truck stabilizers stick if extended fully out. (Peterbilt Technicians had to manually retract)
- Tower supply valve was leaking to Aerial Ladder Discharge Nozzle; it had to be repaired.
- Master drain was leaking; it had to be repaired.
- Tanks suction line was leaking; it had to be repaired.
- Tank fill valve was leaking; it had to be repaired.
- Onboard air compressor, which maintains air pressure in air tanks for brake system was recently replaced again.
- Ground to Ladder Tip Communication Systems needs repairs.

Meanwhile, it must be noted ... we have maintained the Aerial Ladder Truck over the course of 33 years. Some things to be noted are as follows:

- The engine is a CAT engine; we have never had any issues with the engine.
- The truck passes its annual commercial and pump tests every year.
- We can get ball valves for our water supply valves that are worn out.
- In 2017, we completed Non-Destructive Testing (NDT), which is required every five years.
- In 2018, we replaced all the tires and rims on the truck.

An Aerial Ladder Truck is one of the most important devices in any fire rescue services fleet as it is used to provide lifesaving rescues for any building, as well as establishing a **high angle accurate master stream** for any burning structure, including single storey structures.

Meanwhile, we have utilized our Aerial Ladder Truck to take people off roofs, as well as for a master stream on numerous fires over the years. We have used it at a train derailment to dilute a leaking peroxide railcar, which was on its side. As well, in the last 3-years, we used it as a master stream on a large single storey building, which was on fire.

Community Risk

The Town of Fort Frances has many high risks within our community and are as follows:

- **Busiest train traffic in North America**, which are transporting dangerous goods/hazardous materials.
 - 30-plus trains per day travel through our community.
 - Currently, the trains are two miles long, and in the future will increase in length.
 - We already had **a train derailment** this past **July 21, 2019** within our town.
 - Most recently, CN Rail officials participated in a Fort Frances Council virtual meeting on October 13, 2020, which had the Manager of Public Affairs in Ontario Daniel Salvatore stating there are many factors causing derailments, including traffic volumes.
- **Increase dangerous goods/hazardous materials** travelling through our community via International Border.
- Our downtown business core is **1920-1930 era** and consists of many two storey buildings, which are **not sprinklered**.
- As well, we have multiple three-story apartment buildings, which are **not sprinklered**.

Aerial Ladder Replacement: Quint Aerial Device

The replace for our community's aging aerial ladder truck would potentially be a **Single Axel Quint Aerial Device**. Our 1988 Aerial Ladder Truck is a tandem axel and has a 75-foot Aerial Straight Stick Ladder.

As well, a **Request for Proposal** would be written to include either a **Straight Stick Ladder** or a **Ladder Platform (Height to be determined)**.

A Quint Aerial Device has five major components:

- fire pump,
- water tank,
- aerial device,
- ground ladders,
- and hoses.

The intent is to go out for a **Request for Proposal (RFP)** in early 2021; this is so we can obtain a true cost of what it would be to replace our 1988 Aerial Ladder Truck.

Respectfully submitted,



Tyler Moffitt
Fire Chief/CEMC
Fort Frances Fire Rescue Service