Township of South Stormont

ACTION REQUEST

Fire and Rescue Department



To: Council

From: Morris Lamer, Fire Chief

Date of Meeting: June 28, 2023

Subject: Damaged Tanker – Station No. 3

Recommendation:

Whereas in 2010 an International 7400 Eastway tanker was put into service at Station No. 3 (Newington);

And whereas to ensure fire response is not jeopardized, it is necessary to address on-going problems with the tank portion of the vehicle; Now therefore be it resolved that Council instructs staff to proceed with replacing the existing body and tank at an approximate cost of \$221,408, and further that the cost be covered from working capital reserves.

Executive Summary:

In 2010 a tanker, International 7400 Eastway, was put into service at Station No. 3 (Newington). The elliptical style tank portion has been repaired several times from September, 2016 to February, 2022, for total cost of \$45,152.57. It is currently leaking again at a rate of half a tank per week. Station No. 3 firefighters are continuously monitoring the water levels and adding the required amount.

It is necessary that a more permanent solution be put into place to ensure fire response is not at risk.

Background:

The fire tanker at Station No. 3 (Newington) was acquired in 2010. As noted above, the tank portion has been repaired a number of times between 2016 and 2022. As the leak continues, it is necessary for a more permanent solution.

Three options are discussed below, with Option No. 3, being staff's recommended choice.

Option No. 1 Repair

This tank has been repaired multiple times. It was noted the last time it was repaired that the aluminum that makes up the tank is not a strong alloy, which is causing the cracking issues. Repairing or patching would only be a quick fix, with continuous investment in money and on-going downtime.

Option No. 2 Refurbish

The tank is a large part of the structure of the body of the truck. The compartments are welded to the tank and are supported together on a subframe, which is attached/bolted to the frame of the truck. To remove the tank and replace it with a new poly tank, Battleshield would have to remove the entire body structure (tank and compartments) and dissect the body, keeping only the compartments. To rebuild the body to receive the new tank, Battleshield would have to build a new subframe and walls. This step is complicated by the current elliptical shape of the tank and the new tank being a T-shape. To attach the new walls and subframe, there would be a considerable amount of prototyping during fabrication which is time consuming and costly.

Option No. 3 Replace the Body and Tank

It is staff's recommendation that we replace the existing tank and body for two main reasons:

- The first reason is that replacing the body and tank is a more economically sound solution for the long term. Refurbishing the current body and installing a new tank will cost the same as a new tank and body, which will come with a lifetime warranty (not transferable to another chassis) on the tank and a twenty-year warranty on the body. This will ensure that the future of this truck is cost free in the way of tank and body repairs.
- The second reason is downtime for the truck. Should the decision to refurbish be made, the truck would be tied up with the contractor for the entire time the truck is overhauled. However, should the decision to replace the body and tank be made, the process could be scheduled reducing downtime.

To further explain, having the tank manufactured will take a few months. Building and painting the new body will take two months. It is planned to offset these times and keep the truck in service, by taking critical measurements for the tank and body, before starting the project. Once a delivery date is set for the tank, Battleshield will start the job of building the body and getting it painted, followed by dismantling the truck and preparing the chassis for the new body and tank. The new tank and body mounted on the truck with updated reflective striping.

The following photos are provided to further explain Option No. 3 and can be viewed as attached as well.

CURRENT BACK OF TRUCK



Changes to current set up

- Remove hose reel compartment
- Replace steps with folding ladder
- Relocate scene lights
- Remove ladder and hard suction hose compartment

PROPOSED BACK OF TRUCK (example only)



- Replace aluminum tank with Poly tank (tank will not be exposed to elements – Dry side build design)
- · Relocate traffic advisor and back up camera
- Replace hard covers with vinyl black tarp (old covers do not fit new body
- Add Max Vision tank level gauge



Changes to this side

- Ladder and hard suction hose compartment removed.
- Scene lights relocated to top of body
- Holly pipe and Hard suction hose trays for 6" on wall.
- Do you need the cylinder storage tubes?
- Upgrade reflective to new style black and gold leaf
- Remove side camera
- Remove pump panel and plumbing (pump will sit on a tray and there will be a Tank to Pump 4" connection from tank)
- All compartments will now be squared off and have straight rear walls.
- Trays and shelves that can be reused will be reused
- Body extended to accommodate back of truck
- Beacon emergency light will be installed at rear top corner of body





Changes to this side

- Porta tank centered on body
- R1 compartment shortened
- Do you need the cylinder storage tubes?
- Body extended to accommodate back of truck
- Beacon emergency light will be installed at rear top corner of body.
- Do you need the cylinder storage tubes?

Alignment with Community Strategic Plan:

Goal 1: Corporate Capacity

Objective 1.4: Tools and Technology

Risk and Asset Management Considerations:

Station No. 3 (Newington) requires a fully operational tanker as the primary water source in the area as Newington does not have fire hydrants.

Options:

Option No. 1 Replace

Option No. 2 Refurbish

Option No. 3 Replace the Body and Tank.

Financial Impact:

The estimated cost to replace the body and tank, described as Option No. 3 above, is \$221,408. The project was not included in the 2023 annual budget, as such, the funds will be covered through working capital reserves.

Others Consulted:

CAO

Director of Finance/Treasurer