



The Corporation of the Town of Tecumseh

Fire & Rescue Services

To: Mayor and Members of Council

From: Wade Bondy, Director Fire Services & Fire Chief

Date to Council: May 12, 2020

Report Number: FIRE-2020-06

Subject: Amendment to 2020-2024 Fire Equipment Five Year Capital Works Plan

Recommendations

It is recommended:

That the purchase of replacement self-contained breathing apparatus equipment **be added** to the 2020-2024 Fire Equipment Five Year Capital Works Plan, in the year 2020;

And that the amount of \$305,900 including non-rebateable HST **be authorized and funded** through the Fire Equipment Lifecycle Reserve.

Executive Summary

The purpose of this report is to seek approval to expedite the purchase of replacement self-contained breathing apparatus (SCBA) equipment in 2020 to take advantage of a discount available through a cooperative purchase with the Township of Wilmot.

Background

The current inventory of SCBA used by Fire Services' personnel were purchased and placed into service in 2009, as approved by Council (Motion RCM-305/09). The SCBA, manufactured by MSA Safety Inc., had a service life of 10 years; however, with proper care and maintenance this lifespan was anticipated to extend slightly beyond the 10-year period.

At its meeting held December 10, 2019, Council approved (Motion RCM 396/19) the Fire Five (5) Year Capital Works Plan, as recommended by Report No. FIRE-2019-08. Development of

a replacement program for SCBA was identified in the report as one of the items to be undertaken in 2020.

Comments

In researching replacement options and costs for SCBA equipment, Administration would provide the following information.

National Fire Protection Association (NFPA) Standards Update

At the time of purchase, the SCBA were certified to NFPA 1981, Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services, 2007 Edition, which was the current standard at the time. NFPA standards are updated on an approximate 5-year cycle and NFPA 1981 has been updated twice since 2009, most recently in 2019.

The 2019 update to NFPA 1981 contained significant changes to the requirements for SCBA. Two key safety improvements required under the 2019 standard are the following:

- The requirement for the end of service time indicator (i.e. low air alarm) to activate when the air supply reaches 35% of a full bottle, as opposed to the previous requirement to activate at 20-25%. This earlier activation provides the firefighter significantly more time to retreat from a dangerous atmosphere prior to running out of breathing air.
- The requirement for two distinct actions to be taken to remove a regulator from a face piece (mask) has been added. This requirement greatly reduces the chance of a regulator inadvertently being pulled out of a face piece in a dangerous environment.

Both of these changes would greatly improve the safety of firefighters in hazardous environments.

Status of Current SCBA Inventory

As with any asset that experiences heavy use, once the asset is beyond its anticipated lifespan additional maintenance is typically required and maintenance costs increase accordingly. The warranty duration for the existing SCBA was 10 years and has now expired.

The existing SCBA would remain in service until such time as Fire Services has taken delivery and been trained on use of the new SCBA. Administration has reached out to vendors to investigate the salvage value of the equipment. Any funds received for the equipment would be used to offset the purchase price of the new SCBA. Currently, two of the 36 SCBA units have been taken out of service due to the costs of required repairs making repair of the units not financially viable.

With respect to the SCBA air cylinders, NFPA standards limit the lifespan of cylinders to 15 years, with hydrostatic testing required every 5 years. In 2009, 108 air cylinders were purchased together with the SCBA and all 108 are still in service today. It is anticipated that the cylinders will remain in service until 2024. Phased replacement of the cylinders will be proposed in a future year's budget for Council's consideration and is shown in Attachment 1 in

years 2022, 2023 & 2024. According to NFPA standards, cylinders that are retired from service must be made inoperable.

SCBA Evaluation

In 2020, both the LaSalle Fire Service and Lakeshore Fire Services are scheduled to replace their inventory of SCBA. LaSalle Fire Service arranged demonstrations from three manufacturers - 3M Scott Fire & Safety, Drager, and MSA Safety Inc. - and invited representatives from Tecumseh Fire Services to take part in the demonstrations.

SCBA provided by the three manufacturers were evaluated for safety features, ease of use, comfort, and ongoing maintenance requirements. SCBA manufactured by MSA Safety Inc. (model G1) was the preferred option for Tecumseh Fire Services in all categories following the evaluation. The proposed MSA G1 SCBA come with a 15-year lifespan and warranty.

In addition, by purchasing the MSA SCBA, Fire Services would be able to use our existing air cylinders with the new SCBA, meaning we would be able to utilize the remaining years of service life of the cylinders prior to their replacement.

Continued use of MSA SCBA also ensures interoperability with neighbouring fire departments including LaSalle and Windsor. At the time of this report, Lakeshore was undecided as to the supplier of their new SCBA.

Cooperative Purchase

In 2019, the Township of Wilmot issued RFP 2019-18 for the supply of MSA G1 SCBA, which closed August 2, 2019. This RFP included a cooperative purchase clause that required the successful proponent to extend pricing submitted under the RFP to fire departments from Waterloo Region and surrounding areas for purchases completed in 2020. The successful proponent under this RFP was AJ Stone Company Ltd.

AJ Stone Company Ltd. has provided a quote for the supply of MSA Safety Ltd. G1 SCBA to Tecumseh Fire Services based on the Township of Wilmot RFP pricing, forming the basis of the financial implications noted in this report.

The Town's Purchasing Policy allows the participation in cooperative purchasing with other government agencies where it is in the best interests of the Town, and the purposes, goals and objectives of the policy are complied with by the other government agency. The RFP issued by the Township of Wilmot was issued in accordance with their Purchasing By-Law (2014-45) which required a publicly issued RFP and Council approval for goods valued over \$50,000.

Administration is recommending the purchase of replacement SCBA equipment in 2020 in order to take advantage of the discount available through the cooperative purchase with the Township of Wilmot.

Consultations

Financial Services

Financial Implications

A quote provided by AJ Stone Company Ltd. in the amount of \$305,900 including non-rebateable HST for the purchase of the 36 SCBA units represents a savings of approximately \$37,000 based on pricing received in a previous quote provided for the equipment. This pricing would only be available for a purchase completed in 2020, under the terms of the Township of Wilmot's RFP. Further, any salvage value from the existing SCBA would be used to offset the purchase costs of the new equipment.

Funding for this purchase will come from the Lifecycle (LC) Fire Equipment reserve. The Amended 2020-2024 Fire Equipment Five-Year Capital Works Plan is included in this report as Attachment 1.

This purchase will put the LC Fire Equipment reserve into a deficit position in which this reserve is projected to remain for the extent of the five-year capital plan. An increase to the annual allocation will be required such that the reserve will be able to recover from its deficit position and return to financial stability. Based on known expenditure requirements and costs reflected in Attachment 1, an increase to the annual allocation of \$30,000 is required to resolve the deficit position over the course of a few years and should be considered during the 2021 budget process. See Attachment 2 for projected reserve balance assuming an annual allocation increase of \$30,000 effective for 2021.

The previous SCBA replacement cost in 2009 was approximately \$185,000 for 36 units. The Town's complement of firefighters has increased to 42 members since the last replacement and while the number of SCBA units remains at 36, additional masks must be purchased for the new staff. Additionally, the replacement cost of SCBA has increased in excess of 60% during this same timeframe.

Link to Strategic Priorities

Applicable	2019-22 Strategic Priorities
<input type="checkbox"/>	Make the Town of Tecumseh an even better place to live, work and invest through a shared vision for our residents and newcomers.
<input type="checkbox"/>	Ensure that Tecumseh's current and future growth is built upon the principles of sustainability and strategic decision-making.
<input checked="" type="checkbox"/>	Integrate the principles of health and wellness into all of Tecumseh's plans and priorities.
<input checked="" type="checkbox"/>	Steward the Town's "continuous improvement" approach to municipal service delivery to residents and businesses.
<input type="checkbox"/>	Demonstrate the Town's leadership role in the community by promoting good governance and community engagement, by bringing together organizations serving the Town and the region to pursue common goals.

Communications

Not applicable ☒

Website ☐

Social Media ☐

News Release ☐

Local Newspaper ☐

This report has been reviewed by Senior Administration as indicated below and recommended for submission by the Chief Administrative Officer.

Prepared by:

Wade Bondy
Director Fire Services & Fire Chief, C.E.M.C.

Reviewed by:

Tom Kitsos, CPA, CMA, BComm
Director Financial Services & Chief Financial Officer

Recommended by:

Margaret Misek-Evans, MCIP, RPP
Chief Administrative Officer

Attachment Number	Attachment Name
1	Amended 2020 – 2024 Fire Equipment Five (5) Year Capital Works Plan
2	Projected LC Fire Equipment Reserve with Allocation of \$30,000 in 2021